

Exhibit 1

Nos. 16-1188 -1190, -1191, -1192, -1194, -1195, -1197, -1198, -1199

United States Court of Appeals for the Federal Circuit

EVOLUTIONARY INTELLIGENCE, LLC,

Plaintiff-Appellant,

v.

APPLE INC.; FACEBOOK INC.; FOURSQUARE LABS, INC.; GROUPON,
INC.; LIVINGSOCIAL, INC.; MILLENNIAL MEDIA, INC.; SPRINT NEXTEL
CORPORATION; SPRINT COMMUNICATIONS COMPANY, L.P.; SPRINT
SPECTRUM L.P.; SPRINT SOLUTIONS, INC.; TWITTER, INC.; and
YELP, INC.,

Defendants-Appellees

On Appeal from the United States District Court for the Northern District of
California, Case Nos. 5:13-cv-03587-RMW, 5:13-cv-04201-RMW, 5:13-cv-
04202-RMW, 5:13-cv-04203-RMW, 5:13-cv-04204-RMW, 5:13-cv-04205-RMW,
5:13-cv-04206-RMW, 5:13-cv-04207-RMW, and 5:13-cv-04513-RMW,
Hon. Ronald M. Whyte., Senior Judge, Presiding

PLAINTIFF-APPELLANT'S CORRECTED OPENING BRIEF AND ADDENDUM

TODD M. KENNEDY
GUTRIDE SAFIER LLP
100 Pine Street, Suite 1250
San Francisco, CA 94111
Telephone: (415) 639-9090
Facsimile: (415) 449-6469
Attorney for Plaintiff-Appellant

CERTIFICATE OF INTEREST

Counsel for Plaintiff-Appellant Evolutionary Intelligence, LLC certifies as follows:

1. The full name of Plaintiff-Appellant is Evolutionary Intelligence, LLC. There are no other parties represented by Plaintiff-Appellant's counsel in this appeal.
2. Evolutionary Intelligence, LLC is the real party in interest.
3. The following parent corporation owns at least 10 percent of the stock of Evolutionary Intelligence, LLC: Incandescent, Inc.
4. The names of all law firms and the partners or associates that appeared for Plaintiff-Appellant in the trial court or are expected to appear in this court are: Adam J. Gutride, Seth A. Safier, Todd M. Kennedy, Anthony J. Patek, Marie A. McCrary, and Matthew T. McCrary, all of whom are associated with Gutride Safier LLP.

Respectfully submitted this 25th day of April, 2016.

GUTRIDE SAFIER LLP

/s/ Todd Kennedy

Attorney for Plaintiff-Appellant

TABLE OF CONTENTS

| | |
|---|-------------|
| CERTIFICATE OF INTEREST | i |
| TABLE OF CONTENTS | ii |
| TABLE OF AUTHORITIES | v |
| STATEMENT OF RELATED CASES..... | viii |
| STATEMENT OF JURISDICTION..... | 1 |
| STATEMENT OF THE ISSUES..... | 1 |
| STATEMENT OF THE CASE..... | 2 |
| A. Overview | 2 |
| B. The Patents Describe the Limitations of the Prior Art “Static Information Model” of Processing Computerized Data..... | 5 |
| C. The Patents Disclose and Claim a Unique Arrangement of Specific Structures for Solving the Problems Associated with the Static Information Model. | 7 |
| 1. <i>The ‘536 Patent Improves the Processing of Dynamic Information Regarding External Time and Location.</i> | 9 |
| 2. <i>The ‘682 Patent Enables Dynamic Processing of Information Relating to Search Queries.</i> | 13 |
| D. Procedural History..... | 17 |
| SUMMARY OF THE ARGUMENT | 18 |
| ARGUMENT..... | 22 |
| I. The District Court Erred by Failing to Apply the Correct Rule 12(b)(6) and Rule 12(c) Standards..... | 22 |

| | | |
|-------------|---|-----------|
| A. | The District Court Erred by Relying on Facts Outside the Pleadings. | 23 |
| B. | Alternatively, the District Court Erred by Refusing to Consider Plaintiff’s Expert’s Testimony. | 27 |
| C. | The District Court Erred by Refusing to Draw Reasonable Inferences in Evolutionary’s Favor..... | 28 |
| II. | The District Court Erred by Holding that the Patents Are Ineligible Under Section 101..... | 31 |
| A. | The District Court Erred in Applying <i>Mayo</i> Step One and in Finding that the Patents Are Directed at Abstract Ideas..... | 33 |
| 1. | <i>The District Court Overgeneralized the Patents and Failed to Recognize their Focus on Solving a Problem Specifically Within the Realm of Computers.</i> | <i>33</i> |
| 2. | <i>The Patents Do Not Resemble Any “Age Old” Methods.</i> | <i>39</i> |
| 3. | <i>The District Court’s Overgeneralization of the Patents Caused it to Erroneously Apply Alice.</i> | <i>42</i> |
| B. | The District Court Erred in Applying <i>Mayo</i> Step Two..... | 45 |
| 1. | <i>Even if the Patents Claim Abstract Ideas, They Are Drawn to Inventive Concepts to Improve the Functioning of Computers.</i> | <i>45</i> |
| 2. | <i>The Patents’ Claims Implement the Inventive Concepts with Specific Arrangements of Particular Structures Operating in a Specific Way.....</i> | <i>47</i> |
| 3. | <i>The Patents’ Claims Do Not Threaten to Preempt the Field of Data Processing.....</i> | <i>50</i> |
| III. | The District Court Erred in Entering Judgment Without Allowing Evolutionary an Opportunity to Amend its Complaint..... | 53 |
| | CONCLUSION | 54 |

| | |
|--|-----------|
| ADDENDUM..... | 56 |
| PROOF OF SERVICE | 58 |
| CERTIFICATE OF COMPLIANCE | 59 |

TABLE OF AUTHORITIES

Cases

| | |
|--|------------|
| <i>Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.</i> , 728 F.3d 1336 (Fed. Cir. 2013) | 18, 29 |
| <i>Alice Corp. Pty. Ltd. v. CLS Bank Int’l</i> , 134 S. Ct. 2347 (2014) | passim |
| <i>Ameranth, Inc. v. Genesis Gaming Solutions, Inc.</i> , No. 11-cv-00189, 2014 WL 7012391 (C.D. Cal. Nov. 12, 2014) | 52 |
| <i>Apple Inc. v. Samsung Elecs. Co.</i> , No. 12-cv-00630 (N.D. Cal. July 17, 2014)..... | 46 |
| <i>Ashcroft v. Iqbal</i> , 556 U.S. 662 (2009) | 29 |
| <i>Bilski v. Kappos</i> , 561 U.S. 593 (2010) | 50 |
| <i>California Inst. of Tech. v. Hughes Commc’ns Inc.</i> , 59 F. Supp. 3d 974 (C.D. Cal. 2014) | 33, 42, 51 |
| <i>Chavez v. United States</i> , 683 F.3d 1102 (9th Cir. 2012) | 23, 29 |
| <i>Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n</i> , 776 F.3d 1343 (Fed. Cir. 2014) | 37, 43 |
| <i>CyberSource Corp. v. Retail Decisions, Inc.</i> , 654 F.3d 1366 (Fed. Cir. 2011)..... | 50 |
| <i>DDR Holdings, LLC v. Hotels.com, L.P.</i> , 773 F.3d 1245 (Fed. Cir. 2014) | passim |
| <i>Diamond v. Diehr</i> , 450 U.S. 175 (1981) | 47, 50 |
| <i>Doe v. United States</i> , 58 F.3d 494 (9th Cir.1995) | 53 |
| <i>France Telecom S.A. v. Marvell Semiconductor Inc.</i> , 39 F.Supp.3d 1080 (N.D. Cal. 2014) | 42, 50, 51 |
| <i>Garaux v. Pulley</i> , 739 F.2d 437 (9th Cir. 1984) | 27 |
| <i>Jewel v. Nat’l Sec. Agency</i> , 673 F.3d 902 (9th Cir. 2011) | 53 |

| | |
|---|----------------|
| <i>Karamanos v. Egger</i> , 882 F.2d 447 (9th Cir.1989) | 24 |
| <i>Lee v. City of Los Angeles</i> , 250 F.3d 668 (9th Cir. 2001)..... | 22, 23, 24 |
| <i>Lopez v. Smith</i> , 203 F.3d 1122, 1127 (9th Cir. 2000) (en banc) | 53 |
| <i>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</i> , 132 S. Ct. 1289 (2012) | 31, 33, 47, 48 |
| <i>Messaging Gateway Solutions LLC v. Amdocs Inc.</i> , Case No. CV 14-732-RGA, 2015 WL 1744343 (D. Del. Apr. 15, 2015)..... | 34 |
| <i>Modern Telecom Sys. LLC v. Juno Online Servs., Inc.</i> , No. 14-cv-0348, 2015 WL 1240182 (C.D. Cal. March 17, 2015) | 51 |
| <i>Munoz v. United States</i> , No. 10CV01003-MMA (NLS), 2011 WL 7146176 (S.D. Cal. Oct. 24, 2011)..... | 25 |
| <i>Nat'l Ass'n for Advancement of Psychoanalysis v. California Bd. of Psychology</i> , 228 F.3d 1043 (9th Cir. 2000) | 29 |
| <i>Sparling v. Hoffman Const. Co.</i> , 864 F.2d 635 (9th Cir. 1988)..... | 25 |
| <i>Thinket Ink Info. Res., Inc. v. Sun Microsystems, Inc.</i> , 368 F.3d 1053 (9th Cir. 2004) | 53 |
| <i>TQP Dev., LLC v. Intuit Inc.</i> , No. 12–cv–00180, 2014 WL 651935 (E.D. Tex. Feb. 19, 2014) | 42 |
| <i>Turk v. I.R.S.</i> , 187 F.3d 649 (9th Cir. 1999) | 24 |
| <i>Ultramercial, Inc. v. Hulu, LLC</i> , 722 F.3d 1335 (Fed. Cir. 2013) (vacated on other grounds) | 36 |
| <i>Ultramercial, Inc. v. Hulu, LLC</i> , 772 F.3d 709 (Fed. Cir. 2014)..... | 34 |
| <i>Ultramercial, LLC v. Hulu, LLC</i> , 657 F.3d 1323 (Fed. Cir. 2011)..... | 50 |
| <i>United States v. \$11,500.00 in U.S. Currency</i> , 710 F.3d 1006 (9th Cir. 2013) | 53 |
| <i>United States v. Corinthian Colleges</i> , 655 F.3d 984 (9th Cir. 2011).... | 23, 25, 29, 49 |

Rules

| | |
|------------------------------------|----|
| Fed. R. Civ. P. 56(c)(1) (A) | 28 |
|------------------------------------|----|

STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5, Plaintiff-Appellant states as follows:

- (a) There have been no previous appeals in the above-captioned cases.
- (b) Plaintiff-Appellant is aware of no other case that will be directly affected by the Court's decision in the above-captioned cases.

STATEMENT OF JURISDICTION

The district court had jurisdiction over the above-captioned cases under 28 U.S.C. §§ 1331, 1338(a), and it entered final judgment on October 6, 2015, disposing of all of the parties' claims. Appx0154. Plaintiff timely appealed on November 3, 2015. This Court has jurisdiction under 28 U.S.C. § 1295(a)(1).

STATEMENT OF THE ISSUES

The issues to be decided on this appeal are:

1. Did the district court err when it relied on facts outside the pleadings to grant Defendants' motions to dismiss and for judgment on the pleadings on the ground that the Patents lack eligible subject matter under section 101?
2. Did the district court err when it failed to draw the reasonable inference that the Patents supply an inventive concept under section 101, when they improve the functioning of computers by allowing computers to process containerized data in superior and more efficient ways?
3. Did the district court err in determining that the Patents are directed at an abstract idea when the Patents identify "a problem specifically arising in the realm of computer networks," and claim a solution that is "necessarily rooted in computer technology in order to overcome [that] problem"?
4. Did the district court err when it determined that the Patents' claims, which contain significant limitations regarding the processing of computerized

containerized data, including specific computer structures necessary to practice the claims, as well as unique arrangements of those structures, are insufficient to prevent the Patents from preempting the entire field of containerized data processing?

5. Did the district court err in dismissing the case and entering judgment without affording Plaintiff an opportunity to amend its complaint to address the factual issues the district court identified?

STATEMENT OF THE CASE

A. Overview

The district court held that Plaintiff-Appellant Evolutionary Intelligence, LLC's patents—U.S. Patent Nos. 7,010,536 and 7,702,682 (the “Patents”)—are ineligible for patent protection under section 101, granting Defendants' motions to dismiss and for judgment on the pleadings. To reach this result, the district court abandoned the legal standard for Rule 12 motions—including basing its decision on facts it created out of whole cloth, disregarding the language and limitations of the claims, and ignoring the single most critical issue in this case: that the Patents are directed at solving a specific computer problem to improve the data-processing function of computers themselves.

The Patents claim inventions that allow computers to process data where external-to-the-device time and location and previous search history information

are constantly changing and updating. Prior to the Patents' priority date of January 1998, computers were limited by the "static information model" of computerized data processing, and they could not process dynamic modifications to data in the way claimed by the Patents. For example, in 1997, no computer could provide a user a list of recommended restaurants that varied depending on the user's location, day of the week, time of day, ratings provided by other users, and the user's previous browsing history. In today's age of smartphones, this may seem like a conventional use of computers, but twenty years ago it was groundbreaking. The Patents disclose a novel way for computers to achieve this type of dynamic data processing through specific arrangements of computer-specific components, including information containers, registers, and gateways.

The district court held that Evolutionary's patents are directed at an ineligible abstract idea and dismissed Evolutionary's case under Rule 12(b)(6) and 12(c) because it determined the Patents resemble "age-old forms of information processing," like those employed by "libraries," "video rental stores," "barista[s]," "bartender[s]," and "other human enterprises." But none of the facts relating to any of the purported "age old" practices the district court referenced appear anywhere in the pleadings. Instead, apart from the library reference, which the district court pulled from an unsupported (and therefore improper) fact-based argument in Defendants' briefing, the district court simply invented the facts upon which it

based its decision, denying Evolutionary even the most basic opportunity to respond or counter the factual comparisons the court drew. The district court's abandonment of the proper standard for assessing pleading motions represents a fundamental error that this Court must correct.

The district court also failed to apply the well-established rule on motions to dismiss that a district court must assume the truth of the plaintiff's allegations and draw reasonable factual inferences in the plaintiff's favor. The single most important factual issue in this case is that the Patents are directed at improving the functioning of computers themselves. That fact distinguishes Evolutionary's patents from other software patents that this Court and the Supreme Court have found ineligible. The Patents do not simply take an abstract idea or a well-known business process—such as the concept of hedging against financial risk or using a third party to mediate a settlement—and perform the concepts on a computer. Instead, the Patents are directed specifically at a problem *in computer engineering*, and they open up a whole new field of dynamic data processing capabilities that did not exist previously. The district court should have, at minimum, drawn the reasonable inference that the Patents improve the functioning of computers, but it ignored the issue entirely.

The district court also erred in the substance of its section 101 analysis. It over-generalized the Patents' purpose without construing any of the claim terms,

and it disregarded the specific limitations of the claims. The abstracts of the Patents describe their purpose in concrete terms: to overcome the limitations of the static information model of computerized data processing. Moreover, the Patents' claims contain significant limitations that prevent them from preempting the field of computerized data processing, which is the primary concern of the section 101 analysis. The claims set forth the specific types of structures, as well as the specific arrangements of those structures, necessary to practice the invention. There are myriad other ways to process computerized data, including fifteen examples of prior art systems identified by the Defendants, which the USPTO found in an *inter partes* review proceeding did **not** practice the claims of the Patents. The district court therefore erred when it held that the Patents do not contain limitations "sufficiently more" than the abstract idea it identified.

B. The Patents Describe the Limitations of the Prior Art "Static Information Model" of Processing Computerized Data.

Inventor Michael DeAngelo filed the provisional applications for the Patents more than eighteen years ago. Appx0314. DeAngelo continues to manage Evolutionary, and he also owns a significant interest in it. Appx0959. The Patents describe inventions for improving the computerized processing of "containerized" data, such as the data that make up web pages. The specification describes the field of invention as relating to "creating and manipulating information containers with dynamic interactive registers in a computer, media or publishing network, in order

to manufacture information on, upgrade the utility of, and develop intelligence in, a computer network” Appx0345 (1:14–20).¹

The specification describes how prior art computer systems were limited by the “static information model,” whereby computers processed static information (i.e., information supplied by the information “creator”) but did not efficiently modify the information based on interactions with information seekers and users, information supplied by others, and expert rule-based systems. Appx0345 (1:55–57). The specification identifies seven shortcomings of the prior art static information model: (1) “specific content [on a network] such as a document remains inert, except by the direct intervention of users, and is modified neither by patterns of history of usage on the network, [n]or the existence of other content on the network;” Appx0345 (1:58–62), (2) content cannot be “reconstruct[ed] by expert rule-based, fuzzy logic, or artificial intelligence based systems,” because it “resides in a fixed location and structure;” Appx0345 (1:63–2:7), (3) storage mediums cannot be altered “according to the actual recorded and analyzed hierarchically graded usage of any given information resource residing on that storage medium;” Appx0345 (2:8–13), (4) “information resource groupings remain

¹ Unless otherwise stated, all citations in this brief to the specification refer to the specification of the ’536 patent. The specifications of the Patents, which claim priority to the same provisional application, are substantively the same.

fixed on the given storage medium location according to the original installation by the resource author” and cannot be “altered according to the actual recorded and analyzed hierarchically graded usage of that information resource;” Appx0345 (2:13–18), (5) search engines cannot take advantage of successful or optimized search templates because content remains static and unaffected by prior searches; Appx0345 (2:19–32), (6) content cannot be easily modified “without communicating with the owners or operators of those information resources” to obtain their permission to do so; Appx0345 (2:33–39), and (7) networks cannot utilize “the expert intelligence of other information users nor the expert intelligence of an observant computer system” to reconstruct information access routes to benefit other users. Appx0345 (2:41–49).

C. The Patents Disclose and Claim a Unique Arrangement of Specific Structures for Solving the Problems Associated with the Static Information Model.

To overcome the significant limitations of the static information model, the specification describes an arrangement of particular computer-specific structures to improve computers’ ability to process information. The most basic structures the specification describes are “dynamic information containers.” A container, at minimum, includes a logically encapsulated portion of cyberspace, a *register*, and a *gateway*. Appx0349 (9:2-4). The registers attach to, and form part of, the containers. Appx0346 (3:10-15). Examples of registers, which are discussed in

more detail below, include (i) a *unique identification register*; (ii) a *second register* governing container interactions; (iii) an *active register*; (iv) a *passive register*; and (v) a *neutral register*. Containers may also have an *information element*, such as text, audio, or video. *See* Appx0359-60 (claims 1, 2, 14, 15, 16). The specification describes the *gateways* as having rules to enable the various containers to interact with each other and with other system components. Appx0346-47 (4:54-5:11).

As discussed in more detail below, the claims require that these structures be arranged in specific ways to enable computers to process containerized data in a manner that results in dynamic modifications that improve the computers' future processing efforts, thereby overcoming the limitations of the prior art static information model.

For example, the invention enables computers to provide users a dynamically changing list of recommended restaurants that differs depending on the user's location, the day of the week and time of day (e.g., breakfast, brunch, lunch, or dinner), ratings provided by other users, information supplied by the restaurant, and the user's browsing history. Appx2823 ¶ 35. The invention also allows computers to store historical information to ensure that future processing for that user and other users is handled more efficiently. *Id.* From the bias of today's computer capabilities, these improvements may seem fairly mundane or conventional. However, as confirmed by Evolutionary's expert in computer

science, one skilled in the art of computing nearly two decades ago would have understood these improvements to be a groundbreaking departure from the static information model. Appx2823-24 at ¶¶ 35, 38. One of skill in the art would have also understood that the Patents disclose a system that transformed conventional web infrastructure into an application platform with content processing, storage, creation, and dissemination capabilities that were not possible with the static information model. Appx2824 at ¶ 38. Accordingly, the invention breaks with the old model of the centralized web, making the Internet more useful and relevant to the information user. (*Id.*)

1. The ‘536 Patent Improves the Processing of Dynamic Information Regarding External Time and Location.

In contrast to the static information model, the invention disclosed by the ’536 patent is specially designed to process computerized information dynamically. In particular, the ’536 patent focuses on processing constantly changing information corresponding to external-to-the-apparatus time (Appx0359-60, claims 1 and 15) and external-to-the-apparatus location (Appx0359-60, claims 2 and 16) to make computers’ future processing of information more efficient. Appx2825 ¶ 40.

To do so, the invention utilizes the structures discussed above—gateways, registers, information elements, and (optionally) active time registers, passive time registers, neutral time registers, active space registers, passive registers, neutral

space registers, acquire registers, container history registers, and the various other registers set forth in the dependent claims. The dynamic information containers facilitate access to stored information at appropriate times and in relation to pertinent locations, making the information more useful to the user. As users access the information containers, the dynamic registers are updated with information regarding their use, allowing them to evolve without direct human input. Appx2822-23 ¶ 34.

The claims of the '536 patent are drawn to an embodiment of the invention in which there are “a plurality of *containers*,” each of which is “a logically defined data enclosure.” Appx0359-60 (claims 1, 2, 15, and 16). Each container must have (i) “*an information element*,” (ii) “a first register for storing a unique container identification value,” and (iii) “a *gateway* attached to and forming part of the container” that “control[s] the interaction of the container with other containers, systems, or processes.” *Id.*

Independent claims 1 and 15 further require that each container have “a *second register* having a representation designating time and governing interactions of the container with other containers, systems or processes according to utility of information in the information element relative to an external-to-the-apparatus event *time*.” Appx0359-60 (emphasis added). In contrast, independent claims 2 and 16 require that the “second register” of each container govern

interactions according to “an external-to-the-apparatus ***three-dimensional space***.” Appx0359-607 (emphasis added).²

Independent claim 1 further requires (i) “an *active time register* for identifying times at which the container will act upon other containers, processes, systems or gateways”; (ii) “a *passive time register* for identifying times at which the container can be acted upon by other containers, processes, systems or gateways”; and (iii) “a *neutral time register* for identifying times at which the container may interact with other containers, processes, systems or gateways.” Appx0359. In contrast, independent claim 2 requires (i) “an *active space register* for identifying space in which the container will be acted upon by other containers, processes, systems or gateways”; (ii) “a *passive register* for identifying space in which the container can be acted upon by other containers, processes, systems or gateways”; and (iii) “a *neutral space register* for identifying space in which the container may interact with other containers, processes, systems, or gateways.” Appx0360.

² The certificate of correction to the '536 patent that issued on June 26, 2012 clarifies that the word “time” in Claim 16 on Line 33 has been replaced with the word “space,” and that the phrase “event time” on line 37 has been replaced with the phrase “three dimensional space.” Appx3910.

Independent claims 15 and 16 do not require the active/passive/neutral registers. Instead, they require an “*acquire register* for controlling whether the container adds a register from other containers or adds a container from other containers when interacting with them.” Appx0360.

Dependent claims 3–8 add significant structural limitations to independent claims 1 and 2. These structures include: a “*container history register* for storing information regarding past interaction of the container with other containers, systems or processes” Appx0359 (claim 3); a “*system history register* for storing information regarding past interaction of the container with different operating system and network processes” Appx0359 (claim 4); “a *predefined register* ... associated with an editor for user selection and being appendable to any container” Appx0360 (claim 5); “a *user-created register* ... generated by the user, and being appendable to any container” Appx0360 (claim 6); “a *system-defined register* ... controlled and used by the system and being appendable to any container” Appx0360 (claim 7); and “an *acquire register* for controlling whether the container adds a register from other containers or adds a container from other containers when interacting with them” Appx0360 (claim 8).

Dependent claims 9–13 provide additional limitations with respect to the gateway of independent claims 1 and 2. In claim 9, the gateway “includes means for acting upon another container ... using the plurality of registers to determine

whether and how the container acts upon other containers.” Appx0360. Claim 10 requires that the gateway be capable of “allowing interaction ... using the plurality of registers to determine whether and how another container can act upon the container.” Appx0360. According to claim 11, the gateway must be capable of “gathering information [by] recording register information from other containers, systems or processes that interact with the container.” Appx0360. In claim 12, the gateway must be capable of “reporting information [by] providing register information to other containers, systems or processes that interact with the container.” Appx0360. Claim 13 specifies that the gateway includes “an *expert system* including rules defining the interaction of the container with other containers, systems or processes.” Appx0360.

Finally, dependent claim 14 limits the items that could make up the “information element” of claims 1 and 2. Appx0360.

2. The '682 Patent Enables Dynamic Processing of Information Relating to Search Queries.

The invention of the '682 patent is designed to overcome the static information model's limitations with respect to processing search queries. In the static information model, searches did not evolve to reflect how useful the search results were to users, and search strategies that produced successful results were not available to other users. Appx0393 (1:63–2:58). Instead, the prior art merely

allowed “hits” for a given web page to be tracked, without any record of the page’s utility. *Id.* (2:41–63).

The invention of the ’682 patent overcomes these limitations by making dynamic modifications when processing search queries to make computers’ future processing of search queries more efficient. Appx2824 at ¶ 37. To do so, the claims utilize a specific arrangement of containers, registers, and gateways. *Id.* In particular, dynamic registers encapsulated within a plurality of information containers are updated with data regarding interactions between different information containers as searches are performed. *Id.* This allows data regarding the different information containers to evolve as information within the containers is accessed. *Id.*

The independent claims of the ’682 patent all require “*first container registers* encapsulated and logically defined in a plurality of *containers*.” Appx0407-08 (Claims 1, 19, and 21, and 23). After a search query is received, these first container registers are searched. *Id.* In independent claims 1, 19, and 21, the search query results in “*identified containers*” responsive to or associated with the search query. Appx0407-08. In contrast, in independent claim 23, the search query results in “*identified search query templates* encapsulated in identified containers.” Appx0408. According to all independent claims, “historical data associated with the interaction of the identified containers with other containers

from the plurality of containers” is defined in the first container registers and searching “comprises searching the historical data.” Appx0407-08 (Claims 1, 19, 21, and 23). The identified containers are then “encapsulate[ed] ... in a new container.” *Id.* All independent claims also require “updating second container registers of the identified containers with data associated with interactions of the identified containers with the new container.” (*Id.*) Finally, claims 1, 19, and 21 require providing “a list characterizing the identified containers,” whereas claim 23 requires providing “a list characterizing the identified one or more search query templates to formulate subsequent search queries.” Appx0407-08.

The dependent claims add significant limitations. Dependent claim 2 requires that the “search query comprises a labeled data tree having at least one parent-child relationship.” Appx0407. Claim 3 involves “providing information identifying containers that have previously been used to respond to one or more processed queries that are substantially similar to the search query.” Appx0407. According to claim 4, “the provided information is stored in one or more search templates.” Appx0407. Claim 5 combines the limitations of claims 2, 3, and 4. Appx0407. Claim 6 builds on claim 5 and further requires “receiving a selection of one of the substantially similar search phrases” and “providing a list of previously identified containers associated with the selected search phrase.” Appx0407. Under claim 7, “the list provides a title of each identified container and a short description

of its contents.” Appx0407. Claims 8 and 9 require “receiving a *container search level parameter*,” but the two claims use the parameter in different ways; in claim 8, the searching is done only within that search level parameter, whereas in claim 9, “the list of identified containers only comprises containers associated with the container search level parameter.” Appx0407. Claim 10 requires “encapsulating the search query into a search container.” Appx0407. Claim 11 builds on claim 10 by further requiring that a gateway receive the search container, store “data contained within a register of the search container,” and “determin[e] whether any registers of containers accessible via the gateway are associated with the register of the search container.” Appx0407.

Dependent claims 12–15 depend on claim 11, but add still further significant limitations. Claim 12 requires “generating a new gateway” and “associating the container with the new gateway.” Appx0407. Claim 13 requires “periodically aggregating the contents of registers in a plurality of gateways to characterize a plurality of containers coupled thereto.” Appx0407. Claim 14 requires that the contents of the registers in each of the plurality of gateways comprise “at least one metric chosen from ... frequency of access of the gateway, grade of access of the gateway, description of users that have accessed the gateway, an identity of containers that have accessed the gateway, parameters associated with the gateway register, and historically accumulated register data.” Appx0407. Claim 15 requires

“monitoring transactions involving one or more gateways or containers.”

Appx0407.

Claims 16 and 17 depend on claim 15. Claim 16 requires “generating new containers based on the monitored transactions.” Appx0408. Finally, claim 17 requires that the transactions “are based on each instance a gateway or container passes through another gateway or container.” Appx0408.

D. Procedural History

Evolutionary filed its complaints against Defendants for patent infringement in October 2012. *See, e.g.*, Appx0410. One year later, Defendants Apple, Facebook, Twitter, and Yelp filed eight petitions in the United States Patent and Trademark Office for *inter partes* review of the Patents. Appx2865-3068. Collectively, the petitions asserted fifteen patent and non-patent prior art references. *Id.* The USPTO rejected seven of the petitions on the papers and declined to institute a trial. On the final petition, it held a trial and issued final judgment in favor of Evolutionary. Appx2865-3068. In reaffirming the validity of the Patents, the USPTO repeatedly criticized the Defendants for failing to address the specific language of the claims, and for treating the claims’ requirements imprecisely. *See, e.g.*, Appx2961-62.

While the *inter partes* reviews were pending, the district court stayed the litigation. Appx2277. After litigation resumed, Defendants moved to dismiss and

for judgment on the pleadings of invalidity under section 101. Appx0003. After a hearing, the district court granted Defendants' motions. Appx0017.

SUMMARY OF THE ARGUMENT

The district court erred by disregarding the standard of review that applies to motions to dismiss under Rule 12(b)(6) and motions for judgment on the pleadings under Rule 12(c). When deciding such motions, a court is not permitted to consider facts outside the pleadings, and it is required to draw all reasonable factual inferences in favor of the plaintiff.

Although the question of patent eligibility under section 101 is ultimately one of law, it necessarily depends on "underlying factual issues." *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013). At least two key factual issues were relevant to the motions here: (1) whether the Patents resemble "age old" methods of processing information, as the district court concluded; and (2) whether the Patents improve the functioning of computers themselves, as Evolutionary alleges.

The district court determined that the Patents are directed at the abstract idea of "searching and processing containerized data" because the patents resemble purported "age old" methods of processing information, including the practices of "libraries," "video rental stores," "barista[s]," "bartender[s]," and "other human enterprises." But no facts pertaining to any of these purported "age old" methods

of processing information appear anywhere in the pleadings. And, despite the fact that Evolutionary proffered the declaration of a computer expert whose testimony would have distinguished the Patents' claims from these "age old" practices, the district court refused to consider the expert report as beyond the scope of materials appropriate for consideration at the pleading stage. Accordingly, the district court erroneously considered facts outside the pleadings that favored the Defendants (including facts that not even the Defendants raised), while refusing to consider the facts presented by Plaintiff's expert.

Evolutionary's pleadings also contain sufficient facts from which the district court should have drawn the reasonable inference that the Patents improved the functioning of computers themselves. Under *Alice* such an inference would render the patents eligible under section 101. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2359 (2014). Specifically, the Patents' specifications, which form part of Evolutionary's pleadings in this case, disclose that computers of the time were limited in their data analysis capabilities by the "static information model" and that the inventions overcame those limitations. Because the specifications state that the inventions enable computers to process containerized data in superior and more efficient ways, Evolutionary is entitled to the reasonable inference that the Patents improve the functioning of computers, and are therefore eligible under section 101. The district court erred by failing to draw this inference.

In addition to disregarding the appropriate standard of review, the district court also erred in the substance of its application of the two-part *Mayo* test under section 101. The first step of the *Mayo* analysis determines whether the patent claims are directed at an abstract idea. If so, then the second step of the analysis determines whether the patent nevertheless supplies an inventive concept and has sufficient limitations to prevent preempting the field encompassing the abstract idea itself. The district court erred at both steps.

Under *Mayo* step one, a software patent is not directed at an abstract idea if it identifies “a problem specifically arising in the realm of computer networks” and claims a solution that is “necessarily rooted in computer technology in order to overcome [that] problem.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014). The Patents identify static data processing as a problem specifically arising in the realm of computer networks and claim inventions to overcome those limitations by using structures necessarily rooted in computer technology, such as information containers, registers, and gateways. Because the Patents here are similar to those in *DDR Holdings*, the district court should have determined that they are not directed at an abstract idea.

The district court further erred at step one of *Mayo* by defining the purpose of the Patents at too high a level of generality. The court determined that the patents are directed at the overly broad abstract idea of “searching and processing

containerized data,” which, at a minimum, was error because it failed to recognize the fact that the inventions are limited to **computerized** containerized data. Had the district court construed the Patents claims, this would have been evident, as even Defendants’ proposed claims constructions recognized that the Patents are directed solely at computers. The district court’s erroneous overgeneralization of the Patents’ subject matter enabled the district court to compare the inventions to “video rental stores,” “barista[s],” and “bartender[s]”—things that are clearly outside the field of the inventions. The court’s overgeneralization also led the court to erroneously conclude that the Patents are directed at “an information organization problem,” not a problem “unique to any field of computing.”

The district court also erred at step two of the *Mayo* analysis. First, as noted above, the Patents improve the function of computers themselves. Under *Alice*, that is enough to show that they are eligible under section 101. Second, the Patents contain significant limitations regarding how computerized containerized data is processed, including the specific types and arrangements of structures necessary to practice the Patents’ claims. Accordingly, the Patents do not come close to preempting the field of computerized containerized data processing. Indeed, in the *inter partes* review proceeding filed by the Defendants, the USPTO found the **fifteen** prior art systems dealing with the processing of computerized containerized data raised by Defendants did not practice the claims of the Patents. There can be

no preemption when there are so many non-infringing ways to practice in the field in question.

Finally, the district court erred by failing to give Evolutionary an opportunity to amend its complaint. Ninth Circuit precedent requires a district court to provide the plaintiff an opportunity to amend the complaint, even if the plaintiff did not request leave to amend. At a minimum, Evolutionary could amend its complaint to add facts from the expert declaration it submitted, to distinguish the Patents from the “age old” methods the district court identified, and to provide further detail to show that the Patents improve the functioning of computers themselves.

ARGUMENT

I. The District Court Erred by Failing to Apply the Correct Rule 12(b)(6) and Rule 12(c) Standards.

As discussed below, the district court erred by (i) relying on facts outside the pleadings—including facts that the court itself invented; (ii) refusing to consider facts presented in the declaration of Evolutionary’s computer science expert; and (iii) refusing to consider statements in the Patents’ specifications showing that the Patents improve the functioning of computers. Accordingly, this Court should reverse the district court’s dismissal for failure to observe the proper standard of review at the pleading stage. *See, e.g., Lee v. City of Los Angeles*, 250 F.3d 668, 688 (9th Cir. 2001) (reversing district court’s 12(b)(6) dismissal because the

district court “assumed the existence of facts that favor defendants based on evidence outside plaintiffs’ pleadings, took judicial notice of the truth of disputed factual matters, and did not construe plaintiffs’ allegations in the light most favorable to plaintiffs”).

A. The District Court Erred by Relying on Facts Outside the Pleadings.

A district court “may not consider any material beyond the pleadings in ruling on a Rule 12(b)(6) motion.” *Lee*, 250 F.3d at 688. The same holds true for motions for judgment on the pleadings. *See Chavez v. United States*, 683 F.3d 1102, 1108 (9th Cir. 2012) (“Analysis under Rule 12(c) is ‘substantially identical’ to analysis under Rule 12(b)(6).”); *see also United States v. Corinthian Colleges*, 655 F.3d 984, 999 (9th Cir. 2011) (at pleading stage, courts may not consider facts outside complaint and documents integral to the complaint.).³

The district court ignored these well-established principles and relied on facts outside of the pleadings to determine that the Patents are directed at abstract ideas. For example, the district court found, as a matter of fact, that the Patents

³ There are only two exceptions: (1) a court may consider documents that are integral to the complaint—which here would include the patents themselves—and (2) a court may also “take judicial notice of ‘matters of public record.’” *Corinthian Colleges*, 655 F.3d at 999 (quoting *Lee*, 250 F.3d at 688). A court may not take judicial notice of any facts that may be “subject to reasonable dispute.” *Id.* (citing *Lee*, 250 F.3d at 689). More specifically, a court may not, “on the basis of evidence outside of the Complaint, take judicial notice of facts favorable to Defendants that could reasonably be disputed.” *Id.* (citing *Lee*, 250 F.3d at 689–90).

resembled, *inter alia*, library staff recommendation lists, video rental store “customer favorites” shelves, curated art exhibits, and barista and bartender practices. Appx0010-11, 0013-14. The district court then concluded that the Patents “merely take these age-old ideas and add a computer, which is insufficient to confer patent eligibility.” Appx0014. But, neither the complaint nor the Patents make any reference to libraries, video stores, art galleries, baristas, or bartenders. Instead, the district court pulled these facts from thin air—except for the library reference, which it pulled from a factually unsupported argument in Defendants’ briefing—and then based its entire decision on them. Appx0010-11, 0014. Doing so was reversible error. *See Lee*, 250 F.3d at 689 (9th Cir. 2001) (finding that there was no basis for the district court to make factual findings that were not set forth in the pleadings).

It is particularly troubling that the district court invented most of the facts upon which it based its decision, because doing so denied Evolutionary the opportunity to respond. Denying Evolutionary that opportunity violated basic principles of due process and fairness in litigation and constitutes reversible error. *Cf. Turk v. I.R.S.*, 187 F.3d 649, 649 (9th Cir. 1999) (“Except in limited circumstances, it is reversible error to dismiss with prejudice *sua sponte* without providing some effective opportunity to respond.”); *Karamanos v. Egger*, 882 F.2d 447, 452 n. 2 (9th Cir.1989) (“A district court must, at a minimum, give a plaintiff

the opportunity to submit a written memorandum before dismissing a cause of action *sua sponte*.”); *Sparling v. Hoffman Const. Co.*, 864 F.2d 635, 638 (9th Cir. 1988) (“The court must give notice of its intention to dismiss and give the plaintiff some opportunity to respond unless the ‘[p]laintiffs cannot possibly win relief.’”).

Defendants may attempt to justify the district court’s decision by arguing that the court could have taken judicial notice of the facts relevant to its conclusion, but such an argument would be wrong for at least three reasons. First, Defendants made no motion to take judicial notice of any facts. *See Munoz v. United States*, No. 10-cv-1003, 2011 WL 7146176, at *4 (S.D. Cal. Oct. 24, 2011) (“Although Defendant filed a Notice of Lodgment for the Guidance Doc. No. 38-3, Defendant failed to request the Court take judicial notice of the document.”). Second, whether the inventions disclosed by the Patents resemble the methods of libraries, video stores, art galleries, baristas, bartenders or any other purported “age old method” are not “matters of public record,” and therefore not facts subject to judicial notice. *See Corinthian Colleges*, 655 F.3d at 999. Third, even if the facts were matters of public record, Evolutionary can and does reasonably dispute them. *See id.* Evolutionary proffered an expert whose testimony establishes that the Patents’ claims are easily distinguishable from the purported “age-old ideas” the

district court later identified.⁴ Appx2826-27 at ¶¶ 43-45; *see also, infra*, Section II.A.1. Accordingly the district court had no basis to take judicial notice of any of the facts on which its decision depends.

Unfortunately, the district court's abandonment of the proper standard for pleading motions has become somewhat common in software cases post-*Alice*.⁵

⁴ Evolutionary offered the Taylor Declaration to counter Defendants' unsupported (and improper) factual arguments regarding libraries and the pencil and paper test, but the testimony is equally relevant to disputing the factual conclusions the district court drew on its own. As explained, *infra*, the district court should have accepted and considered the Taylor Declaration if it was going to consider facts outside of the pleadings to resolve Defendants' motions.

⁵ *See* Rantanen, Jason, *In Rush to Invalidate Patents at Pleadings Stage, Are Courts Coloring Outside the Lines?*, <http://patentlyo.com/patent/2015/07/invalidate-pleadings-coloring.html> (last accessed April 14, 2016) ("While early resolution of patent litigation is laudable, motions directed to the pleadings generally may not consider matters outside what is pled in the complaint. Yet this is what courts are doing — they have been coloring outside the lines when deciding whether a patented software or business method is an ineligible abstraction. They are looking beyond the allegations in the complaint to discern 'fundamental economic concepts.' Independent of anything pled in the complaint, they are making historical observations about alleged longstanding commercial practices and deciding whether the claimed invention is analogous to such practices."); Hadjis, Alexander J., *Are Questions of Fact Being Overlooked in Software Cases?*, <http://www.law360.com/articles/609322/are-questions-of-fact-being-overlooked-in-software-cases> (last accessed April 14, 2016) ("Since the Supreme Court's *Alice Corp.* decision, district courts appear motivated to use Section 101 to swiftly resolve cases involving software patents perceived to lack merit. . . . But, this practice might place the proverbial cart in front of the horse. To put it another way, in an effort to weed out meritless patents and conserve scant judicial resources, the federal judiciary may be glossing over factual issues that require more detailed consideration.").

But *Alice* decided the eligibility question at the summary judgment stage, not the pleading stage. 134 S. Ct. at 2353. Even if *Alice* signals greater restrictions on software patents' eligibility under section 101, it does not authorize courts to disregard the appropriate standards of review when deciding the issue.

Accordingly, this court should reverse the district court's dismissal for failure to observe the proper standard of review for pleading motions.

B. Alternatively, the District Court Erred by Refusing to Consider Plaintiff's Expert's Testimony.

At the same time that the district court relied on facts outside the pleadings—including facts that it invented—the court also refused to consider the facts that were set forth in the declaration of Evolutionary's computer science expert, Scott Taylor. Doing so was error. “If, on a motion under Rule 12(b)(6) or 12(c), matters outside the pleadings are presented to and not excluded by the court, the motion must be treated as one for summary judgment under Rule 56. All parties must be given a reasonable opportunity to present all the material that is pertinent to the motion.” Fed. R. Civ. P. 12(d); *see also Garaux v. Pulley*, 739 F.2d 437, 438 (9th Cir. 1984). (“[W]here matters outside the pleadings will be considered in disposition of a Rule 12(b)(6) motion, so as to convert it into one for summary judgment pursuant to Rule 56, the non-moving party must be sufficiently informed or aware of that fact and be afforded a reasonable opportunity to present all material made pertinent to such a motion by Rule 56.”). Accordingly, if the

district court was inclined to consider facts outside the pleadings (whether from Defendants' briefing or its own invention), it was required to consider the Taylor declaration pursuant to Rule 56.

Further, if this Court finds that the district court's consideration of facts outside the pleadings converted the motion to dismiss into a Rule 56 motion for summary judgment, then the district court's decision must be reversed. Defendants offered, and the district court relied upon, *no evidence* to support the factual determinations underpinning the court's decision. *See* Fed. R. Civ. P. 56(c)(1) (A) ("A party asserting that a fact cannot be or is genuinely disputed must support the assertion by: citing to *particular parts of materials in the record . . .*") (emphasis added). Evolutionary's expert testimony is also more than sufficient to raise a genuine dispute about the factual conclusions the district court drew. So regardless of the standard that applies—Rule 12 or Rule 56—the district court's decision cannot stand.

C. The District Court Erred by Refusing to Draw Reasonable Inferences in Evolutionary's Favor.

The district court erred by refusing to draw reasonable factual inferences in Evolutionary's favor, in contravention of the appropriate standard of review under Rules 12(b)(6) and 12(c). When evaluating pleading motions, a court is required to accept as true all of the plaintiff's non-conclusory allegations and draw all reasonable factual inferences in the plaintiff's favor. *Corinthian Colleges*, 655 F.3d

at 991; *Chavez*, 683 F.3d at 1108. Although the section 101 eligibility determination is ultimately a question of law, this Court has previously recognized that the legal question still depends on “underlying factual issues.” *Accenture Glob. Servs.*, 728 F.3d at 1341.

One central factual issue in this case is whether or not the Patents “improve the functioning of the computer itself.” *Alice*, 134 S. Ct. at 2359. According to *Alice*, if a software patent improves how computers function, it supplies the necessary “inventive concept” to remain patent eligible even if it is directed at an “abstract idea.” *Id.*

Here, Evolutionary pleaded “sufficient factual content” from which the district court should have “draw[n] the reasonable inference that” the Patents improved the functioning of computers, and, therefore, stated a plausible claim for patent eligibility. *See Corinthian Colleges*, 655 F.3d at 991 (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009)). The Patents’ specifications, which Evolutionary attached to its complaints, form part of Evolutionary’s pleadings. *See Nat’l Ass’n for Advancement of Psychoanalysis v. California Bd. of Psychology*, 228 F.3d 1043, 1049 (9th Cir. 2000) (“In determining whether plaintiffs can prove facts in support of their claim that would entitle them to relief, we may consider facts contained in documents attached to the complaint.”). The specifications allege that computers of the time were limited in their data processing capabilities by the

“static information model.” Appx0345 (*See* 1:55–2:2:48). That is, computers did not efficiently process dynamic changes to information based on users’ interactions, information from sources other than the content creator, expert rule-based systems, and external time and space. *Id.* The Patents’ specifications teach how to overcome these limitations to enable computers to process such dynamic modifications to data, which in turn improves computers’ future processing efforts. *See supra*, Statement of the Case at B; *see also* Appx2825 ¶ 40. More specifically, Evolutionary alleges that the claims of the ’536 patent enable computers to process constantly changing, external-to-the-device time and location data to make future processing of time and location data more efficient. *See supra*, Statement of the Case at C.1.; *see also* Appx2825 ¶ 40. Similarly, Evolutionary alleges that the claims of the ’682 patent enable computers to make dynamic modifications when processing computer search queries to make future processing of search queries more efficient. *See supra*, Statement of the Case at C.2; *see also* Appx2825 ¶ 40.

To put this in context, in 1997, computers were not efficient at processing data to provide, for example, dynamic lists of recommended restaurants that varied depending on the user’s location, day of the week, time of day, ratings provided by other users, and the user’s browsing history. Appx2823 ¶ 35. Nor did computers store such inputs to ensure that future processing for that user and other users in similar situations was handled even more efficiently. *Id.* Today, there are a number

of ways for computers to perform these types of tasks, and Evolutionary's patents claim some of them using information containers, registers and gateways. The Patents' specifications state that the inventions enable computers to process data in new and better ways, which the district court was required to accept as true.

Instead of drawing this reasonable inference in Evolutionary's favor, the district court ignored the issue altogether. This was a fundamental error. Had the court properly drawn the inference that the patents improve the functioning of computers, it would have correctly concluded, as explained in the next section, that the patents are eligible under section 101.

II. The District Court Erred by Holding that the Patents Are Ineligible Under Section 101.

To determine whether claims are patent-eligible under section 101, courts must apply the two-step analytical framework the Supreme Court set forth in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296-98 (2012). *See Alice*, 134 S. Ct. at 2355. First, courts must determine "whether the claims at issue are directed to a patent-ineligible concept," such as a law of nature, a natural phenomena or an abstract idea. *Id.* If they are not, then the inquiry ends, and the claims are patent-eligible under section 101. If the claims are directed to a patent-ineligible concept, then courts must proceed to the second step, which assess whether there is anything in the elements of the claim, "both individually and as an ordered combination" that "transform[s] the nature of the claim into a patent-

eligible application.” *Id.* (internal quotations omitted). The second step of this analysis is a “search for an inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* (internal quotations and alterations omitted).

The district court erred at both *Mayo* steps. At step one, the district court recited the purpose of the Patents at too high a level of generality, concluding the patents were directed at the abstract idea of “searching and processing containerized data,” instead of at the more concrete level of overcoming the specific limitations of the static information model of computerized data processing. The district court then compounded its step-one error at *Mayo* step two, by concluding that the Patents do nothing more than take the overly broad abstract idea the district court identified and apply that idea using a computer. The district court’s analysis grossly oversimplified the Patents and completely ignored that the Patents improve the functioning of computers themselves by providing a new way for computers to dynamically and efficiently process certain types of information.

A. The District Court Erred in Applying *Mayo* Step One and in Finding that the Patents Are Directed at Abstract Ideas.

1. The District Court Overgeneralized the Patents and Failed to Recognize their Focus on Solving a Problem Specifically Within the Realm of Computers.

The district court erred under the first prong of *Mayo* by assessing the purpose of the Patents at too high a level of generality. A proper analysis under *Mayo* prong one requires the court to “identify the purpose of the claim—in other words, what the claimed invention is trying to achieve—and ask whether that purpose is abstract.” *California Inst. of Tech. v. Hughes Commc’ns Inc.*, 59 F. Supp. 3d 974, 991 (C.D. Cal. 2014). Although courts “should recite a claim’s purpose at a reasonably high level of generality,” *id.*, they must nevertheless “tread carefully” when doing so “lest [the exclusionary principle] swallow all of patent law.” *Alice*, 134 S. Ct. at 2354 (internal quotations omitted). This is because, “[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* (internal quotations omitted); *accord Mayo*, 132 S. Ct. at 1293 (“[T]oo broad an interpretation of [the ‘abstract idea’ exception to §101] could eviscerate patent law. For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas”).

Without any restriction on how high courts can generalize the purpose of a patent, courts could conclude that any patent is directed at an abstract idea, and

Mayo prong one would be a nullity. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (“[W]e do not purport to state that all claims in all software-based patents will necessarily be directed to an abstract idea.”). Indeed, as one district court recently noted:

If one looks at almost any patent from far enough away, it could arguably claim an abstract idea. For example, Alexander Graham Bell’s patent [on the telephone] could be said to claim the abstract idea of oral communication. But his invention was not the concept of oral communication itself; it was a technological innovation that allowed a type of oral communication between people who could otherwise not communicate in that way.

Messaging Gateway Solutions LLC v. Amdocs Inc., Case No. 14-cv-0732, 2015 WL 1744343, at *5 (D. Del. Apr. 15, 2015).

The key then is determining how to assess a patent’s purpose at the correct level of generality. Thankfully, this Court has provided guidance on how to do so for software patents. If a software patent identifies “a problem specifically arising in the realm of computer networks,” and claims a solution that is “necessarily rooted in computer technology in order to overcome [that] problem,” then it is not directed at an abstract idea under *Mayo* step one. *DDR Holdings*, 773 F.3d at 1257. That is exactly what the Patents do.

The facts in *DDR Holdings* are instructive. The patents in that case disclosed a method of creating composite websites for electronic shopping purposes to

address the problem of websites losing traffic when visitors clicked on advertising links. *Id.* at 1248–49. In analyzing the patents under *Mayo* step one, this Court noted that, at a high level of generality, DDR Holdings’ claims “address a business challenge,” because the ultimate goal was to retain potential purchasers in a store—a problem known well before computers. *Id.* at 1257. Nevertheless, the Court concluded that DDR Holdings’ patents were not directed at an abstract business idea because the business challenge the patents identified was still “particular to the Internet.” *Id.* “[B]rick and mortar” stores “did not have to account for the ephemeral nature of an Internet ‘location’ or the near-instantaneous transport between these locations made possible by standard Internet communications protocols” when visitors clicked on a hyperlink. *Id.* at 1258. By creating composite websites, DDR Holdings’ patents described a method to solve this computer-specific problem, creating a result that overrode “the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” *Id.* at 1258.

As with DDR Holdings’ patents, the Patents identify “a problem specifically arising in the realm of computer networks,”—*i.e.* the static information model of computerized data processing—and claim a solution that is “necessarily rooted in computer technology in order to overcome [that] problem” by disclosing methods that allow computers to efficiently process dynamic modifications to data. *Id.* at

1257. Also as with DDR Holdings’ patents, the Patents overrode the “routine and conventional” use of computers of the day. In 1997, computers did not have containers that dynamically responded differently to searches based on time, location, and prior searches. Appx2823 ¶ 35. So, just like the patents in *DDR Holdings*, the Patents are not directed at some general abstract idea, but at specific and concrete computer problems.

The district court erred by assessing the Patents at too high a level of generality, concluding that the Patents were directed at the abstract (and very broad) idea of “searching and processing containerized data.” Appx0010. But the court ignored that the Patents are limited, at minimum, to **computerized** containerized data. *See* Appx0345 (describing that the purpose of the patents is “to manufacture information on, upgrade the utility of, and develop intelligence in, *a computer network*”) (emphasis added). Had the district court construed the Patents’ claims, this would have been evident, as even Defendants’ proposed claims constructions recognized that the Patents are directed solely at computers.⁶

⁶ Claim construction is not necessarily a pre-requisite to the determination of patent eligibility, but where, as here, “there are factual disputes, claim construction should be required.” *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1339 (Fed. Cir. 2013) (vacated on other grounds). Indeed, since the district court did not engage in claim construction and decided the issue on the pleadings, the court erred by not reading the claims in the manner most favorable to Evolutionary. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343,

Appx3313-17, 3320-24, 3331-33. It is this focus on a computer-specific problem that makes this case virtually identical to *DDR Holdings*.

Because the district court framed the purpose of the Patents too broadly and removed the computer limitation, the district court erred when it distinguished *DDR Holdings*. According to the district court: “unlike in *DDR Holdings*, the problem identified by EI—failure to dynamically update data structures over time and by locations, or based on search history—is not *unique* to computing. Indeed, it is not even a computing problem, but *an information organization problem*.” Appx0013 (emphasis added).⁷ But this Court did not hold that a problem must be “unique” to computer networking to remove a software patent from the realm of abstract ideas. Rather, this Court held only that the problem need arise “specifically” within the realm of computer networks and address problems “particular” to computers. *DDR Holdings, LLC*, 773 F.3d at 1257. Indeed, this

1349 (Fed. Cir. 2014) (upholding district court’s dismissal on eligibility grounds prior to claim construction only because the “district court construed the terms identified by CET ‘in the manner most favorable to [CET],’ necessarily assuming that all of CET’s claims required a machine, even though several claims do not expressly recite any hardware structures.”).

⁷ Neither the specification nor the claims make any reference to solving any problem having to do with “organization” of information. It is unclear how the district court arrived at the conclusion that the patents are directed at “organization” rather than computing.

Court recognized that the problem of retaining website visitors, i.e. purchasers in a store, was not *unique* to the Internet, as it was, at a high level of generality, a standard “business challenge.” *Id.*

Similarly, although at a high level of generality the problems of the static information model of computerized data processing (i.e. failure to dynamically update information) might have analogues in non-computerized records, they are *specific* to computers in the context of “containers,” which are a specific type of logically defined data structure on a computer. And, just like the patents in *DDR Holdings* had to account for the “ephemeral nature of Internet locations” and the “near instantaneous transport” between those locations when arriving at its solution—which did not arise in the non-computerized context of the problem—so too did the Patents have to account for facets of computerized data processing that are “particular” to computers. *Id.* at 1257. The claims require that computerized structures be arranged in specific ways to enable computers to process containerized data in a manner that results in dynamic modifications that improve the computers’ future processing efforts, thereby overcoming the limitations of the prior art static information model. Appx2817, 2822 ¶¶ 21, 33-48. Accordingly, as Evolutionary’s expert stated, the Patents’ “methods for solving problems associated with the static information model fall *squarely within the domain of computers.*” Appx2827-91 ¶¶ 45, 48 (emphasis added).

2. The Patents Do Not Resemble Any “Age Old” Methods.

The court’s gross overgeneralization of the Patents’ purpose and its failure to engage in claims construction also led it to reach the unsupportable conclusion that the Patents’ claims are comparable to age-old methods practiced by *baristas*, *bartenders*, as well as “*libraries*, *businesses* and other human enterprises with *folders*, *books*, *time-cards*, *ledgers*, and so on.” Appx0010 (emphasis added). But, as Evolutionary’s expert stated, the Patents’ “methods for solving problems associated with the static information model fall *squarely within the domain of computers*.” Appx2827-28 ¶¶ 45, 48 (emphasis added). As confirmed by (i) the specification; (ii) the Defendants’ own extrinsic evidence presented for claim construction; and (iii) Evolutionary’s computer science expert, the terms used in the claims—such as “container,” “gateway,” “register,” “information element,” “expert system,” and “encapsulation”—are all specific computer science terms. (See Appx0314-0361; Appx3336-3351; Appx2828 ¶ 48) For example, Defendants contended in their proposed claim constructions that “container” should be construed as “a logically defined data enclosure which encapsulates its content” and be limited to *digital* data, Appx3313-17, 3320-24 (emphasis added), and that the term “expert system” be construed as “*computer* system that can make inferences to draw conclusions.” Appx3331-33 (emphasis added). In support of

their proposed constructions of “expert system” and “encapsulation,” the Defendants also relied on four computing dictionaries. Appx3337-50.

In reaching its conclusions, the district court failed to engage in *any* construction of the claims. Had it done so, there would have been even less support for its finding that books, time-cards, lists, and shelves constitute “information containers.” Contrary to the court’s conclusions, no book, folder, ledger, or paper file organizational system resembles the claims of the Patents, which are limited to computerized data.⁸

The other “age old” practices identified by the district court are equally inapposite. The district court noted that “[r]estaurant guides have long provided lists of restaurants organized by cuisine, city, neighborhood, and rating.” Appx0013. But no prior art restaurant guide could dynamically update a list of restaurants based on the restaurant’s hours of operation and proximity to a user’s location while the user was walking through a particular city, or know the types of food the user likes based on previous searches. The district court also reasoned that “[l]ibraries have long organized their holdings by subject matter and author name, and have employed ‘dynamic’ containers in the form of rotating selections based

⁸ As further confirmed by Evolutionary’s expert, computer systems that existed in 1997 or 1998 were limited by the static information model in the way they processed data. Appx2826-27 ¶ 44.

on staff review, recent release, or other criteria, located in a specific section of the library.” Appx0013. But here the court is referring to a physical “container,” which is fundamentally distinct from the digital container of the patents. Further, the library, video, and store merchant systems invoked by the court have limited utility for a user who does not share common traits with the staff reviewers who created the selections, and the selections cannot update themselves for each reader based on that reader’s and other readers’ previous checkouts or searches. None of these physical “age-old” methods can come close to doing what the Patents claim. Appx2827 ¶ 45.

The same is true of the district court’s conclusion that “the idea of ‘storing historical information to ensure that future processing for that user and other users is handled more efficiently’ is practiced by every local barista or bartender who remembers a particular customer’s favorite drink.” Appx0012-90. Even if humans could perform each of the limitations of the Patents (which they could not) (Appx2827 ¶ 45), that does not take away from the Patents’ “inventive concept.” Humans can remember things like a customer’s favorite drink and arguably use that memory to speed up the brain’s “future processing,” but computers in 1997 using the prior art static information model could not. Evolutionary’s patents

taught how to overcome the limitations of the static information model, to enable computers to perform such tasks.⁹

3. The District Court’s Overgeneralization of the Patents Caused it to Erroneously Apply *Alice*.

The Court’s failure to describe the Patents with the appropriate level of generality fatally infected its ability to properly apply the case law with respect to section 101. The court’s comparison to purported “age old” methods and conclusion that “the claims here merely take these age-old ideas and add a computer” just like the ineligible patents in *Alice* was incorrect. Appx0014. The Patents are easily distinguishable from those rejected by *Alice*. The patents in *Alice*

⁹ No human could do what the Patents claim because no human could sit inside the computer and govern the interactions of computerized data containers, so the district court’s reliance on the pencil-and-paper test was erroneous. Several courts have noted that the “pencil-and-paper test” is generally “unhelpful for computer inventions,” and in fact “can mislead courts into ignoring a key fact: although a computer performs the same math as a human, a human cannot always achieve the same results as a computer,” *Cal IT*, 59 F. Supp. 3d at 994-995. The district court’s use of the test and rejection of Evolutionary’s expert, who offered testimony on this issue (*see* Appx2828 ¶ 45), also highlights the problems with resolving patentability on a Rule 12 motion, as the expert’s opinion would have been sufficient even to defeat summary judgment. *See France Telecom S.A. v. Marvell Semiconductor Inc.*, 39 F.Supp.3d 1080, 1096 (N.D. Cal. 2014) (holding that expert’s opinion that claims “could not be performed by a human ... is a material issue of fact sufficient to defeat summary judgment); *see also TQP Dev., LLC v. Intuit Inc.*, No. 12-cv-0180, 2014 WL 651935, at *5 (E.D. Tex. Feb. 19, 2014) (holding that expert declaration regarding the pencil-and-paper test “by itself is enough to foreclose the entry of summary judgment in the defendants’ favor on the present record”).

attempted to solve the business problem of how to mitigate settlement risk by using a computer as a third-party intermediary. 134 S. Ct. at 2354. As the Court noted, “the concept of [third party] intermediated settlement is ‘a fundamental economic practice long prevalent in our system of commerce.’” *Id.* at 2356. The *Alice* patents simply took this “age-old” concept and added a computer. *Id.*

Alice would apply only if the Patents had identified some “age-old” practice, such as updating library recommendation lists or restaurant guides, and simply added a computer. But that is **not** what the Patents do. Indeed, the district court’s assertion that the Patents merely computerize age old methods for recommending library books, or listing restaurants, or updating video customer favorites demonstrates the district court’s fundamental misunderstanding of the Patents’ subject matter. Appx0013; *see Content Extraction*, 776 F.3d at 1349 (“[T]he determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter.”). The purpose of the Patents is not to solve the problem of how to provide people with a list of nearby places to eat (or of book recommendations, or customer favorite lists). In fact, none of those things are mentioned anywhere in the Patents. Those may be some ultimate applications of the Patents, but they do not correctly define their subject matter for eligibility purposes. The subject of the Patents, as demonstrated by the specifications and claims, is addressing the limitations prior art computers faced in dynamically

modifying and processing data. That is unlike *Alice*, where the patents described their purpose simply as implementing third-party mediation using a computer.

Thus, the district court's erroneous decision extends *Alice* too far. In *Alice*, both the system and method claims paralleled the steps involved in implementing third-party mediation without a computer. That is not the case here. The '536 patent claims computer systems comprising a plurality of containers, each having an information element (e.g., digital text or media), a collection of specific registers that control how that information element interacts with other elements of the computer system (e.g., active, passive, and neutral time or space registers; container history registers; acquire registers), and a gateway (e.g., a computer that controls access to the containers). Appx0359-61. There are no "steps" in these systems, nor are they the elements that one would list if asked to describe the abstract concept identified by the district court of "searching and processing containerized data." And while the '682 patent's claims are directed to methods, their steps (which include computer-specific processes such as "encapsulation," *see* discussion *supra*) are equally unlikely to come to mind if asked to describe the abstract idea of "searching and processing containerized data."

B. The District Court Erred in Applying *Mayo* Step Two.

1. Even if the Patents Claim Abstract Ideas, They Are Drawn to Inventive Concepts to Improve the Functioning of Computers.

The district court erred in applying *Mayo* at step two because it ignored what the Supreme Court made clear in *Alice*: a software patent supplies the necessary “inventive concept” to pass muster under this prong even if it is directed at an abstract idea, so long as it “purport[s] to improve the functioning of the computer itself.” 134 S. Ct. at 2359. The Patents are designed to improve the functioning of computers as computers, i.e., make them able to process more types of information, in better ways, and more efficiently. Indeed, the entire purpose of the Patents is to overcome the limitations of the static information model of computerized data processing. Appx0345. At a minimum, as discussed in section I.C, *supra*, Evolutionary is entitled to the reasonable inference that the Patents improve the functioning of computers, making this a fact issue not amenable to resolution on a motion to dismiss. Accordingly, the Patents are eligible under section 101 even if they relate to abstract ideas.¹⁰

¹⁰ Even Apple recently recognized that patents such as Evolutionary’s remain patent-eligible. In opposing a motion to invalidate its “universal search” patent, which covers simultaneous searching of local device content and Internet content, Apple argued: “By improving the functioning of the computer—making an existing technological process for searching *operate more quickly, efficiently, and*

The Patents are thus unlike the patents *Alice* rejected at *Mayo* step two, because the *Alice* patents simply recited limitations to perform the concept of intermediated settlement on a computer. *Id.* at 2360. The intermediated settlement process did not improve the computers’ ability to function as a computer, i.e., process more data or different types of data, or make existing processing more efficient. *Id.* at 2359. By contrast, here, the Patents taught new ways for computers to efficiently process dynamically changing data and to create new data based on such processing that would improve future processing efforts.

The district court erroneously rejected this analysis, holding that “EI’s insistence that the claims are patent-eligible because they address specific problems in the prior art related to the ‘static information model’ used in computing . . . confuses the ‘inventive feature’ analysis under section 101 with the idea of novelty and nonobviousness under Sections 102 and 103.” Appx0014. But it was the district court that was confused. Evolutionary’s arguments pertaining to the limitations of the static information model are not directed at sections 102 and 103, but at whether the Patents improve the functioning of computers themselves—a section 101 issue. *See Alice*, 134 S. Ct. at 2359. It is true that

competently—claim 25 easily supplies an inventive concept.” *Apple Inc. v. Samsung Elecs. Co.*, No. 12-cv-0630, Dkt. No. 1947 at 8-9 (N.D. Cal. July 17, 2014) (citations omitted, emphasis added).

section 101’s “inventive feature” analysis overlaps the concepts of novelty and non-obviousness; because the Patents improved computer functionality, they are also novel and nonobvious. But that does not, as the district court seemed to think, make Evolutionary’s section 101 argument less persuasive. *See Mayo*, 132 S. Ct. at 1304 (“We recognize that . . . the § 101 patent-eligibility inquiry and, say, the § 102 novelty inquiry might sometimes overlap.”). The district court never squarely addressed Evolutionary’s argument that the patents improve the functioning of computers, and this failure was error.

2. The Patents’ Claims Implement the Inventive Concepts with Specific Arrangements of Particular Structures Operating in a Specific Way.

The Patents are also eligible under section 101 because the claims include detailed and specific limitations on how computers must process dynamically modified data, through the use of a plurality of containers, registers, and gateways. Appx2817, 2822-2829 ¶¶ 20-21, 33-48. A proper Section 101 analysis requires the consideration of *all* these specific limitations, as they appear in the claim language, and in their various combinations. *Diamond v. Diehr*, 450 U.S. 175, 188 (1981). Accordingly, “[i]t is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.” *Id.* The Supreme Court reaffirmed this principle in *Alice*, noting that “we consider the elements of each claim both individually and ‘as an ordered combination’ to

determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S.Ct. at 2355 (quoting *Mayo*, 132 S.Ct. at 1298, 1297).

The claims require specific arrangements of particular computer-specific structures operating in a specific way. Although the fundamental structures are containers, registers, and gateways, the claims require particular *types* of these structures (e.g., “active time registers,” “passive time registers,” “acquire registers,” “identified search query templates,” etc.), and these particular types must interact in a specific manner.

According to the district court, the limitations described above “are directed to employing time, location, and history information in connection with data processing, and encompass nothing more than the conventional and routine activities of searching, updating, and modifying data on a ‘computer network operating in its normal, expected manner’ using conventional computers and computer components.” Appx0015. But this statement defies the facts, both as Evolutionary alleged and as its expert testified. No routine or conventional computer in use before the Patents processed dynamic data in the way the Patents claim. Appx0345; Appx2823 ¶ 35. Prior to the Patents, conventional computers were limited by the static information model of data processing. *Id.* The district court’s refusal to accept these facts as true is yet another example of its failure to

employ the proper standard of review for pleading motions. *See Corinthian Colleges*, 655 F.3d at 999 (holding that a district court must “accept as true” the plaintiff’s factual allegations).

The district court also held that the containers, registers, and gateways that the Patents describe are “simply functional descriptions of conventional concepts of data processing, such as using data registers, or labels, to govern the interaction of various data.” Appx0015. Yet this too ignores the Patents’ specifications, by which these terms must be construed. The term “gateway,” for example, is used not in any conventional sense, but rather is described as “attached to and forming part of the container [and] controlling the interaction of the containers, systems or processes.” *See, e.g.*, Appx0360, claim 16. Similarly, “registers” are not “labels” but rather are “encapsulated and logically defined in a plurality of containers,” *see, e.g.*, Appx0407, claim 1, and are used, for example, to “stor[e] information regarding past interaction of the container with other containers, systems or processes.” *Id.*, claim 3. Thus, as confirmed by Evolutionary’s expert, conventional “labels” do not fulfill the specific tasks and interactions that the claims require. Appx2828-29 ¶ 48.¹¹

¹¹ The district court held that the Patents’ “ineligibility is confirmed by the machine-or-transformation test.” Appx0016. That test, however, is not dispositive. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371 (Fed. Cir.

3. The Patents' Claims Do Not Threaten to Preempt the Field of Data Processing.

The primary concern of the patent eligibility analysis is preemption. *See Alice*, 134 S.Ct. at 2354, 2358 (describing “pre-emption” as both the “concern that drives [the abstract idea] exclusionary principle” and as “undergird[ing] [the Court’s] § 101 jurisprudence”). Specifically, where use of the claimed invention “would effectively grant a monopoly over an abstract idea,” the patent is ineligible under section 101. *Bilski*, 561 U.S. at 611-12 (2010). Conversely, the lack of any real threat of preemption points to the conclusion that a patent is eligible under section 101. *Alice*, 134 S. Ct. at 2354, 2358.

The district court failed to correctly evaluate this critical issue. The court tersely concluded that the Patents are directed at abstract ideas because the court was “mindful that a patent on the abstract idea of searching and processing containerized data which lacks a specific inventive concept to limit its scope poses a real threat of preemption.” Appx0016 n.7.

2011) (citing *Bilski v. Kappos*, 561 U.S. 593, 604 (2010)). Further, the test has been criticized as having “far less application to the inventions of the Information Age.” *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323, 1327 (Fed. Cir. 2011) (vacated on other grounds). Regardless, the Patents pass the test because each “involves a specific system for modifying data that has equally concrete and valuable effects in [its field].” *France Telecom*, 39 F.Supp.3d at 1092 (quoting *Diehr*, 101 S.Ct. at 1048).

Because the Patents' claims provide so many specific requirements regarding containers, registers, and gateways, there is no threat of the patents monopolizing even the processing of **computerized** containerized data, let alone the field of all containerized data processing. Indeed, computerized containerized data can be processed in many ways that do not infringe the Patents. For example, a computer system that uses containers without "a first register for storing a unique container identification value" would not infringe **any** claims of the '536 patent. Nor would a computer system infringe claim 1 of the '536 patent unless it fulfilled the "active time register," "passive time register," and "neutral time register" limitations, as well as **all** of the very specific limitations that the claims ascribe to any of those registers. Because of this specificity in the claims, there can be no preemption. *See France Telecom*, 39 F.Supp.3d at 1092 (no preemption where the claims provide "detailed methods with concrete steps to be applied"); *see also Modern Telecom Sys. LLC v. Juno Online Servs., Inc.*, No. 14-cv-0348, 2015 WL 1240182, *8 (C.D. Cal. March 17, 2015) (upholding patents under Section 101 because "Defendants have failed to demonstrate *that the specific steps recited in the patents* pre-empt all inventions concerning communicating between two modems") (emphasis added); *California Inst. of Tech.*, 59 F. Supp. 3d at 994 (no preemption because patents were "tied to a specific error correction process," and involved limitations that were "not necessary or obvious tools for achieving error

correction.”); *Ameranth, Inc. v. Genesis Gaming Solutions, Inc.*, No. 11-cv-00189, 2014 WL 7012391, *6 (C.D. Cal. Nov. 12, 2014) (no preemption where “one could implement many different player reward systems that do not infringe the claims.”). One of skill in the art would understand there are many ways to process containerized data without infringing the claims. *See* Appx2828 ¶ 47.

Further, as discussed above, in the *inter partes* review proceedings, the USPTO rejected the Defendants’ arguments that fifteen prior art references regarding containerized data processing practiced the Patents’ claims. For example, in the *inter partes* review proceeding involving the Gibbs patent, the USPTO determined that the Gibbs system was capable of processing containerized data and of monitoring the operation of a railroad system, including timing and location, using a computer network and various computer objects and attributes. Nevertheless, the USPTO concluded that, although Gibbs disclosed “containers,” it did not anticipate the claims of the ’536 patent as written. Appx2884. Because there are so many different ways of processing containerized data without infringing any claims of the Patents, it was error for the district court to conclude that the Patents threaten to preempt the field of containerized data processing. To the contrary, the systems and methods disclosed by the Patents are so specific that they do not come close to preempting the field.

III. The District Court Erred in Entering Judgment Without Allowing Evolutionary an Opportunity to Amend its Complaint.

The district court erred by dismissing Evolutionary's complaint and entering judgment without giving Evolutionary the opportunity to amend. Although Evolutionary made no formal motion for leave to amend, the rule in the Ninth Circuit from "a line of cases stretching back nearly 50 years, [is] that in dismissing for failure to state a claim under Rule 12(b)(6), 'a district court should grant leave to amend even if no request to amend the pleading was made, unless it determines that the pleading could not possibly be cured by the allegation of other facts.'" *Lopez v. Smith*, 203 F.3d 1122, 1127, 1130 (9th Cir. 2000) (en banc) (quoting *Doe v. United States*, 58 F.3d 494, 497 (9th Cir.1995)); see also *United States v. \$11,500.00 in U.S. Currency*, 710 F.3d 1006, 1013 (9th Cir. 2013) ("Though Guerrero never moved to amend his claim, the absence of a formal motion for leave to amend does not preclude the district court from granting it."). Indeed, in the Ninth Circuit "[d]ismissal without leave to amend is improper unless it is clear, upon *de novo* review, that the complaint could not be saved by any amendment." *Jewel v. Nat'l Sec. Agency*, 673 F.3d 902, 907 (9th Cir. 2011) (quoting *Thinket Ink Info. Res., Inc. v. Sun Microsystems, Inc.*, 368 F.3d 1053, 1061 (9th Cir. 2004)).

Here, at minimum, Evolutionary could amend the complaints to plead facts sufficient for the Patents' claims to survive a motion to dismiss. Although the

district court refused to consider Evolutionary's proffered expert declaration, Evolutionary could amend the complaints to allege the same facts that appear in the expert's declaration. *See* Appx2810-2831. This would include key facts regarding how one of skill in the art would have understood the existing computer technology and the implications of the claims of the Patents, further establishing that the Patents improve the functioning of computers. Appx2822-2824 ¶¶ 33-38. Leave to amend would also allow Evolutionary to allege facts explaining why the comparisons the district court drew to "age old methods" of organizing information were inapposite. The district court's dismissal was based primarily on improperly drawn factual issues that allowed the court to conclude the Patents were not eligible under section 101. Evolutionary should be allowed the opportunity to amend to address these factual issues upon which the district court improperly relied.

CONCLUSION

For the foregoing reasons, Plaintiff-Appellant respectfully requests that this Court reverse the district court's order dismissing its claims and remand the case for further proceedings.

Respectfully submitted this 25th day of April, 2016.

GUTRIDE SAFIER LLP

/s/ Todd Kennedy

Todd Kennedy
Attorney for Plaintiff-Appellant

ADDENDUM

Case 5:13-cv-04513-RMW Document 225 Filed 10/06/15 Page 1 of 17

United States District Court
For the Northern District of California

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

EVOLUTIONARY INTELLIGENCE,
LLC,

Plaintiff,

v.

SPRINT NEXTEL CORPORATION,
SPRINT COMMUNICATIONS
COMPANY L.P., SPRINT SPECTRUM
L.P., SPRINT SOLUTIONS INC.,

Defendants.

Case Nos. 13-04513, 13-04201, 13-04202, 13-
04203, 13-04204, 13-04205, 13-04206, 13-04207,
13-03587

**ORDER GRANTING MOTION TO
DISMISS AND MOTION FOR
JUDGMENT ON THE PLEADINGS**

EVOLUTIONARY INTELLIGENCE,
LLC,

Plaintiff,

v.

APPLE, INC.,

Defendants.

Case 5:13-cv-04513-RMW Document 225 Filed 10/06/15 Page 2 of 17

United States District Court
For the Northern District of California

1 EVOLUTIONARY INTELLIGENCE,
2 LLC,

3 Plaintiff,

4 v.

5 FACEBOOK, INC.,

6 Defendants.

7 EVOLUTIONARY INTELLIGENCE,
8 LLC,

9 Plaintiff,

10 v.

11 FOURSQUARE LABS, INC.,

12 Defendants.

13 EVOLUTIONARY INTELLIGENCE,
14 LLC,

15 Plaintiff,

16 v.

17 GROUPON, INC.,

18 Defendants.

19 EVOLUTIONARY INTELLIGENCE,
20 LLC,

21 Plaintiff,

22 v.

23 LIVINGSOCIAL, INC.,

24 Defendants.

25
26
27
28
ORDER GRANTING MOTION TO DISMISS

- 2 -

Appx0002

United States District Court
For the Northern District of California

EVOLUTIONARY INTELLIGENCE,
LLC,

Plaintiff,

v.

TWITTER, INC.,

Defendants.

EVOLUTIONARY INTELLIGENCE,
LLC,

Plaintiff,

v.

YELP, INC.,

Defendants.

EVOLUTIONARY INTELLIGENCE,
LLC,

Plaintiff,

v.

MILLENNIAL MEDIA, INC.,

Defendants.

Defendants Sprint Nextel Corporation, Sprint Communications Company L.P., Sprint Spectrum L.P., Sprint Solutions Inc., Apple, Inc., Facebook, Inc., Foursquare Labs, Inc., Groupon, Inc., LivingSocial, Inc., Twitter, Inc., Yelp, Inc., and Millennial Media, Inc. (collectively, “defendants”) move to dismiss plaintiff Evolutionary Intelligence, LLC’s (“EI”) complaint, and for judgment on the pleadings. Dkt. No. 188.¹ Defendants argue that all claims of the asserted patents, U.S. Patent Nos. 7,010,536 (“the ’536 patent”) and 7,702,682 (“the ’682 patent”), are invalid for failure to claim patent-eligible subject matter. For the reasons explained below, the court GRANTS the motion.

¹ ECF citations are to the docket in *Evolutionary Intelligence, LLC v. Sprint Nextel Corporation et al.*, Case No. 13-4213, unless otherwise noted.

I. BACKGROUND

1 EI asserts that defendants each infringe the '536 and '682 patents, both of which are entitled
2 "System and Method for Creating and Manipulating Information Containers with Dynamic
3 Registers." The '682 patent issued on April 20, 2010, and is a continuation of the '536 patent, which
4 issued on March 7, 2006. '682 patent at 1; '536 patent at 1. The two patents share the same
5 specification, claim priority to the same provisional application (No. 60/073,209, filed January 30,
6 1998), identify the same sole inventor (Michael De Angelo), and are both now owned by EI. '682
7 patent at 1; '536 patent at 1; Dkt. No. 1 ¶¶ 12, 17.

8 The common specification describes the patents as directed to a "means to create and
9 manipulate information containers." '682 patent, col.1 ll.28.² EI previously characterized the patents
10 as containing three broad categories of independent claims: (1) methods of tracking searches; (2)
11 time-based information containers; and (3) location-based information containers. *See Evolutionary*
12 *Intelligence LLC v. Sprint Nextel Corp.*, Case No. 12-0791, Dkt. No. 167, at 2 (E.D. Tex. Oct. 17,
13 2012). The specification explains that such containers store information on various types of
14 computer and digital networks, as well as on physical, published, and "other" media. '682 patent,
15 col.3 ll.13–15. The containers include various types of "registers" which perform functions such as
16 identifying the container or contents, providing rules of interaction between containers, and
17 recording the history of the container. *Id.* col.13 ll.4–10. The containers also have "gateways" to
18 "control[] the interaction of the container with other containers, systems or processes." '536 patent,
19 claims 1, 2, 15, and 16. The patents also state that the patented invention "includes a search
20 interface or browser" which allows a "user to submit, record and access search streams or phrases
21 generated historically by himself, other users, or the system." '682 patent, col.6 ll.10–14.

22 The specification summarizes the invention in very broad terms as:

23 [A] system and methods for manufacturing information on, upgrading the
24 utility of, and developing intelligence in, a computer or digital network,
25 local, wide area, public, corporate, or digital-based, supported, or
26 enhanced physical media form or public or published media, or other by
27 offering the means to create and manipulate information containers with
dynamic registers.

28 ² Because the two asserted patents share the same specification, the court adopts defendants' convention of citing the column and line numbers in the '682 patent when referencing the specification. Claim references are of course patent-specific.

Id. col.3 ll.10–16.

The specification describes a preferred embodiment configured with “an input device 24, an output device 16, a processor 18, a memory unit 22, a data storage device 20, and a communication device 26 operating on a network 201.” *Id.* col.7 ll.35–38, Fig. 1; *see also id.* col.7 l.38–col.8 l.44 (describing components).

A. The '682 Patent

The '682 patent contains seven independent claims (claims 1 and 18–23), and sixteen dependent claims. Independent claim 1 is representative:

1. A computer-implemented method comprising:

receiving a search query;

searching, using the computer, first container registers encapsulated and logically defined in a plurality of containers to identify identified containers responsive to the search query, the container registers having defined therein data comprising historical data associated with interactions of the identified containers with other containers from the plurality of containers, wherein searching the first container registers comprises searching the historical data; encapsulating the identified containers in a new container; updating second container registers of the identified containers with data associated with interactions of the identified containers with the new container; and

providing a list characterizing the identified containers.

'682 patent, col. 29 ll.52–67. Independent claim 19 is identical to claim 1 except that the preamble states “[a] computer program product, tangibly embodied on computer-readable media, comprising instructions operable to cause data processing apparatus to” perform the steps of the method in claim 1. *Id.* col.31 ll.28–30. Likewise, independent claim 21 is identical to claim 1 except that it is an apparatus claim in means-plus-function form. *Id.* col. 32 ll.5–22. Independent claim 23 is identical to claim 1 except for the fact that it claims “search query templates” in the place of “containers” in claim 1. *Id.* col. 32 ll.44–61.

Independent claims 18, 20, and 22 are identical to independent claims 1, 19, and 21 respectively, except they claim “polling” gateways rather than “searching” containers. *See id.* col.31 ll.7–27; col.31 l.47–col.32 l.4; col. 32 ll.23–43. However, the claims make clear that “polling the

1 plurality of gateways comprises searching the historical data,” and therefore claims 18, 20, and 22
2 rise or fall with the other independent claims. *See, e.g., id.* col.31 ll.18–20.

3 Dependent claims 2–17 depend from claim 1, and add various component and process
4 limitations such as a “data tree having at least one parent-child relationship” (claim 2), *id.* col.30
5 ll.1–3, and specifying that the “list characterizing the identified containers” “provides a title of each
6 identified container and a short description of its contents” (claim 7), *id.* col.30 ll.25–27.

7 **B. The ’536 Patent**

8 The ’536 patent contains four independent claims (claims 1, 2, 15, and 16) and twelve
9 dependent claims. Each is an apparatus claim. Independent claim 1 is representative:

- 10 **1.** An apparatus for transmitting, receiving and manipulating information
11 on a computer system, the apparatus including a plurality of containers,
12 each container being a logically defined data enclosure and comprising:
13 an information element having information;
14 a plurality of registers, the plurality of registers forming part of the
15 container and including
16 a first register for storing a unique container identification value,
17 a second register having a representation designating time and governing
18 interactions of the container with other containers, systems or processes
19 according to utility of information in the information element relative
20 to an external-to-the-apparatus event time,
21 an active time register for identifying times at which the container will
22 act upon other containers, processes, systems or gateways,
23 a passive time register for identifying times at which the container can
24 be acted upon by other containers, processes, systems or gateways,
25 and
26 a neutral time register for identifying times at which the container may
27 [interact] with other containers, processes, systems or gateways; and
28 a gateway attached to and forming part of the container, the gateway
controlling the interaction of the container with other containers,
systems or processes.

’536 patent, col.30 ll.6–30. Independent claim 2 is identical to claim 1 except that whereas claim 1
is directed to the use of “time” as a means of governing interaction between containers, claim 2 is
directed to the use of “space.” *Compare id.* col.30 ll.15–27 and ll.40–54. Independent claims 15 and
16 are identical to claims 1 and 2, respectively, except claims 15 and 16 contain an “at least one

1 acquire register” limitation in lieu of the three “active,” “passive,” and “neutral” “space” or “time”
2 registers in claims 1 and 2. *Id.* col.32, ll.15–18, 39–42.

3 Dependent claims 3–14 all depend from claims 1 or 2. Dependent claims 3–8 add various
4 additional registers to the “plurality of registers” claimed in claims 1 and 2. *See, e.g., id.* col.30
5 ll.58–62 (“The apparatus of claim 1 or 2, wherein the plurality of registers includes at least one
6 container history register for storing information regarding past interaction of the container with
7 other containers, systems or processes, the container history register being modifiable.”).
8 Dependent claims 9–12 add various additional means-plus-function limitations to the “gateway”
9 claimed in claims 1 and 2. *See, e.g., id.* col.31 ll.18–22 (“The apparatus of claim 1 or 2, wherein the
10 gateway includes means for acting upon another container, the means for acting upon another
11 container using the plurality of registers to determine whether and how the container acts upon other
12 containers.”). Dependent claim 13 adds an “an expert system” limitation to the “gateway” claimed
13 in claims 1 and 2. *Id.* col.31 ll.38–41. Finally, dependent claim 14 limits the “information element”
14 in claims 1 and 2 to “one from the group of text, graphic images, video, audio, a digital pattern, a
15 process, a nested container, bit, natural number and a system.”). *Id.* col.31 ll.42–45.

16 In October 2012, Evolutionary Intelligence, LLC (“Evolutionary Intelligence”) filed
17 complaints alleging infringement of the ’536 and ’682 patents in the Eastern District of Texas
18 against nine groups of defendants.³ From July to September 2013, the nine actions were transferred
19 to this district.

20 The parties subsequently sought *inter partes* review (“IPR”) of the asserted patents at the
21 U.S. Patent and Trademark Office (“PTO”). On April 25, 2014, the Patent Trial and Appeal Board
22 (“PTAB”) granted one IPR petition as to claims 2–12, 14, and 16 of the ’536 patent, but denied
23 defendants’ IPR petitions as to the other claims of the ’536 patent and all claims of the ’682 patent.

24
25 ³ The nine cases are *Evolutionary Intelligence LLC v. Apple, Inc.*, 12-0783 (E.D. Tex. Oct. 17, 2012);
26 *Evolutionary Intelligence LLC v. Facebook, Inc.*, 12-0784 (E.D. Tex. Oct. 17, 2012);
27 *Evolutionary Intelligence LLC v. Foursquare Labs, Inc.*, 12-0785 (E.D. Tex. Oct. 17, 2012);
28 *Evolutionary Intelligence LLC v. Groupon, Inc.*, 12-0787 (E.D. Tex. Oct. 17, 2012); *Evolutionary Intelligence LLC v. LivingSocial, Inc.*, 12-0789 (E.D. Tex. Oct. 17, 2012); *Evolutionary Intelligence LLC v. Millennial Media, Inc.*, 12-0790 (E.D. Tex. Oct. 17, 2012); *Evolutionary Intelligence LLC v. Sprint Nextel Corp.*, 12-0791 (E.D. Tex. Oct. 17, 2012); *Evolutionary Intelligence LLC v. Twitter, Inc.*, 12-0792 (E.D. Tex. Oct. 17, 2012); *Evolutionary Intelligence LLC v. Yelp, Inc.*, 12-0794 (E.D. Tex. Oct. 17, 2012).

1 See '536 patent, IPR2014-00086, Institution of *Inter Partes* Review (P.T.A.B. April 25, 2014)
2 (granting Apple's IPR petition as to claims 2–12, 14, and 16 of the '536 patent). Before the cases
3 were related, all nine defendants brought motions to stay pending IPR in their separate actions, and
4 each motion to stay was granted.

5 On June 23, 2014, the undersigned ordered that the parties in all cases show cause why the
6 *Evolutionary Intelligence* cases should not be consolidated for all pretrial proceedings through claim
7 construction. *See, e.g., Evolutionary Intelligence LLC v. Sprint Nextel Corp., et al.*, Case No. 13-
8 04513 (N.D. Cal. June 23, 2014), Dkt. No. 143. Following a hearing and an order assigning the
9 issue of consolidation and relation to the undersigned, *see Evolutionary Intelligence LLC v. Sprint*
10 *Nextel Corp., et al.*, Case No. 13-04513 (N.D. Cal. July 28, 2014), Dkt. No. 158, the court ordered
11 that the *Evolutionary Intelligence* cases be related, *see Evolutionary Intelligence LLC v. Sprint*
12 *Nextel Corp., et al.*, Case No. 13-04513 (N.D. Cal. July 28, 2014), Dkt. No. 159. Following
13 consolidation, on October 17, 2014 the court granted a motion to maintain the stay in each case.
14 Dkt. No. 184.

15 On April 16, 2015 the PTAB issued its final written decision in the IPR proceedings, holding
16 the '536 patent to be valid over the cited prior art. Dkt. No. 185, at 1. Upon the PTAB's issuance of
17 its final written decision, the stay in these cases automatically expired. *See* Dkt. No. 184, at 14.

18 Defendants filed the instant motion to dismiss and for judgment on the pleadings on June 1,
19 2015.⁴ Dkt. No. 188. EI filed an opposition on June 26, 2015, Dkt. No. 193,⁵ and defendants replied
20 on July 14, 2015, Dkt. No. 200. The court held a hearing on the motion on July 28, 2015.

21
22 ⁴ Because they have yet to file an answer, defendants Groupon and Twitter move under Federal
23 Rule of Civil Procedure 12(b)(6) for an order to dismiss for failure to state a claim, while the
24 remaining defendants move under Federal Rule of Civil Procedure 12(c) for an order granting
judgment on the pleadings. Dkt. No. 188, at 1. Because, as discussed below, the standard for
decision both motions is the same, the court does not distinguish between the two in this order.

25 ⁵ EI filed with its opposition an expert declaration from Scott Taylor. Dkt. No. 193-1. In it, Taylor
26 opines on various aspects of the prior art, and states his opinions regarding the ways in which the
27 asserted patents claim patent-eligible subject matter. *See id.* However, such a declaration is not
28 appropriate for the court to consider on a motion to dismiss or motion for judgment on the
pleadings. *See Hal Roach Studios, Inc. v. Richard Feiner & Co.*, 896 F.2d 1542, 1555 n.19 (9th Cir.
1989). On such motions, the court may only consider the complaint, documents incorporated by
reference in the complaint, and judicially noticed facts. *See Tellabs, Inc. v. Makor Issues & Rights,*
Ltd., 551 U.S. 308, 322 (2007). Accordingly, because the Taylor declaration meets none of these
criteria, the court does not consider it.

II. Analysis

A. Legal Standard

A motion to dismiss for failure to state a claim under Rule 12(b)(6) tests the legal sufficiency of a complaint. *Navarro v. Block*, 250 F.3d 729, 732 (9th Cir. 2001). In considering whether the complaint is sufficient to state a claim, the Court must accept as true all of the factual allegations contained in the complaint. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). However, the Court need not accept as true “allegations that contradict matters properly subject to judicial notice or by exhibit” or “allegations that are merely conclusory, unwarranted deductions of fact, or unreasonable inferences.” *In re Gilead Scis. Sec. Litig.*, 536 F.3d 1049, 1055 (9th Cir. 2008). While a complaint need not allege detailed factual allegations, it “must contain sufficient factual matter, accepted as true, to ‘state a claim to relief that is plausible on its face.’” *Iqbal*, 556 U.S. at 678 (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). A claim is facially plausible when it “allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Id.* at 678. “Determining whether a complaint states a plausible claim for relief . . . [is] a context-specific task that requires the reviewing court to draw on its judicial experience and common sense.” *Id.* at 679.

B. Motion to Dismiss and for Judgment on the Pleadings

Defendants contend that the ’536 and ’682 patents are invalid for failure to claim patent-eligible subject matter. For the reasons set forth below, the court finds that both patents fail to claim patent-eligible subject matter, and GRANTS defendants’ motion to dismiss and for judgment on the pleadings.

Section 101 of the Patent Act describes the types of inventions that are eligible for patent protection: “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Section 101 has long contained “an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012)). In *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, the Supreme Court explained that “the concern

1 that drives this exclusionary principle [is] one of pre-emption.” 134 S. Ct. 2347, 2354 (2014).
2 “Monopolization of [laws of nature, natural phenomena, and abstract ideas] through the grant of a
3 patent might tend to impede innovation more than it would tend to promote it, thereby thwarting the
4 primary object of the patent laws.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1293). However, the Supreme
5 Court has also recognized the need to “tread carefully in construing this exclusionary principle lest
6 it swallow all of patent law.” *Id.* Accordingly, “[a]pplications of [abstract] concepts to a new and
7 useful end . . . remain eligible for patent protection.” *Id.* (internal quotations omitted).

8 The Supreme Court in *Mayo* “set forth a framework for distinguishing patents that claim
9 laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible
10 applications of those concepts.” *Alice*, 134 S. Ct. at 2355. First, a court must “determine whether the
11 claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the court finds that the
12 patent claim recites a patent-ineligible abstract idea, the court then must “consider the elements of
13 each claim both individually and as an ordered combination to determine whether the [elements in
14 addition to the abstract idea] transform the nature of the claim into a patent-eligible application.” *Id.*
15 In this step, the court “must examine the elements of the claim to determine whether it contains an
16 inventive concept sufficient to transform the claimed abstract idea into a patent-eligible
17 application.” *Id.* at 2357.

18 **1. ’682 Patent**

19 The court first looks to whether the ’682 patent recites an abstract idea. Defendants argue
20 that the ’682 patent claims the abstract idea of “searching historical data.” Dkt. No. 188, at 12. EI
21 argues with regard to both the ’682 and ’536 patents that “the purpose of the claims is to enable
22 computers to process containerized data in a way that results in dynamic modifications in order to
23 improve future processing efforts by computers.” Dkt. No. 193, at 15. EI states that the ’682 patent
24 “focus[es] on making dynamic modifications when processing computer search queries” in order to
25 make future searches more efficient. *Id.* The court finds that the ’682 patent recites the abstract idea
26 of searching and processing containerized data. Updating searchable containers of information
27 based on past search results or based on external time or location resembles age-old forms of
28 information processing such as have previously been employed in libraries, businesses, and other

1 human enterprises with folders, books, time-cards, ledgers, and so on. The '682 patent merely
2 computerizes this abstract idea, taking advantage of the conventional advantages of computers in
3 terms of efficiency and speed.

4 Because the court finds that the '682 patent claims the abstract idea of searching and
5 processing containerized data, the court proceeds to the second step in the *Mayo* framework. At this
6 step, the court must determine whether the limitations in the '682 patent represent a patent-eligible
7 application of the abstract idea of searching and processing containerized data. *Alice*, 134 S.Ct. at
8 2357. According to the Supreme Court, "the mere recitation of a generic computer cannot transform
9 a patent-ineligible abstract idea into a patent-eligible invention." *Id.* at 2358. Rather, to satisfy this
10 requirement, a computer-implemented invention must involve more than performance of "well-
11 understood, routine [and] conventional activities previously known to the industry." *Id.* at 2359
12 (internal quotation marks and citation omitted). The patent must contain an inventive concept which
13 "transform[s] the nature of the claim[s] into a patent-eligible application." *Id.* at 2355. Ultimately,
14 the patented invention must amount to "significantly more" than a patent on the ineligible abstract
15 idea itself. *Mayo*, 132 S. Ct. at 1294.

16 The method claimed in the '682 patent comprises the following steps: (1) receiving a search
17 query; (2) searching; (3) encapsulating responsive containers in a new container; (4) updating
18 registers; (5) generating a list. *See* '682 patent, claim 1.⁶ The language of the claims describes the
19 use of containers, registers and gateways to perform these steps on a computer. EI concedes that the
20 structures recited in the claims are conventional and routine. *See* Dkt. No. 193, at 17 (Arguing
21 "[a]lthough the *fundamental* structures are containers, registers, and gateways," the claims are
22 patent-eligible because they implement the inventive concepts with "specific arrangements" of
23 structures) (emphasis added). Each step individually is also conventional and routine, and EI does
24 not argue otherwise. Instead, EI argues that the claims, viewed in combination, contain an inventive
25 concept sufficient to transform the claimed abstract idea into a patent-eligible application.

26 ⁶ Because EI identifies provides no analysis of how either patent's dependent claims differ from the
27 independent claims (and in particular claim 1), and the court does not credit their conclusory
28 assertion in the opposition that the dependent claims recite "significant limitations," the court finds
that the dependent claims for each patent rise and fall with the independent claims. As discussed
herein, the court finds that the independent claims fail to claim patent-eligible subject matter, and
therefore finds that the dependent claims fail for the same reason.

1 Specifically, EI emphasizes that the patent was designed to overcome limitations associated with the
2 static information model of computerized data processing, and that the claims are drawn to patent-
3 eligible subject matter because they improve the functioning of computers. Dkt. No. 193, at 14–17.
4 EI relies primarily on *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), in
5 which the Federal Circuit upheld a patent on the basis that it claimed a particular unconventional
6 solution to an internet-specific problem by overriding the conventional behavior of website
7 hyperlinks. However, far from supporting EI’s position, the Federal Circuit’s decision in *DDR*
8 *Holdings* demonstrates how the asserted claims here are not patent-eligible.

9 The patents at issue in *DDR Holdings* disclosed a system to create composite websites for
10 electronic shopping in an effort to address the problem of websites losing visitor traffic when
11 visitors clicked on advertisements. *Id.* at 1248–49. Under the prevailing mode of operation, host
12 websites would direct visitors to external advertiser websites when visitors clicked on
13 advertisements. *Id.* By contrast, the patents at issue in *DDR Holdings* described a system that would
14 generate a composite web page displaying the advertiser’s product or other content while retaining
15 the “look and feel” of the host website. *Id.* “Thus, the host website can display a third-party
16 merchant’s products, but retain its visitor traffic by displaying this product information from within
17 a generated web page that gives the viewer of the page the impression that she is viewing pages
18 served by the host’s website.” *Id.* at 1249 (internal quotation marks omitted). The Federal Circuit
19 observed that “the precise nature of the abstract idea [implemented in the asserted claims was] not
20 as straightforward as in *Alice* or some of our recent cases.” *Id.* at 1257. Rather, the claims
21 “address[ed] a business challenge (retaining website visitors), [which was] a challenge particular to
22 the internet.” *Id.* The Federal Circuit distinguished cases invalidating patents that “merely recite the
23 performance of some business practice known from the pre-internet world along with the
24 requirement to perform it on the internet” on the basis that the patent in *DDR Holdings* was
25 “necessarily rooted in computer technology in order to overcome a problem specifically arising in
26 the realm of computer networks.” *Id.* The court emphasized that the creation of a composite web
27 page, as opposed to re-direction, “overrides the routine and conventional sequence of events
28 ordinarily triggered by the click of a hyperlink,” and concluded that the claims survived *Alice*

1 because they “recite an invention that is not merely the routine or conventional use of the internet.”
2 *Id.* at 1258–59.

3 Here, EI argues that the asserted patents “were designed overcome the significant limitations
4 associated with the static information model of computerized data processing,” by “enabl[ing]
5 computers to process containerized data in a way that results in dynamic modifications in order to
6 improve future processing efforts by computers.” Dkt. No. 193, at 15. The court in *DDR Holdings*
7 held that asserted claims in that case were patent-eligible because they “specified how . . . to yield a
8 desired result” by “overriding the routine and conventional” operation of the claimed technology.
9 *DDR Holdings*, 773 F.3d at 1258–59. However, unlike in *DDR Holdings*, the problem identified by
10 EI—failure to dynamically update data structures over time and by location, or based on search
11 history—is not unique to computing. Indeed, it is not even a computing problem, but an information
12 organization problem. EI’s attempt to provide a concrete example of the patented idea reveals the
13 deficiency of the claims: according to EI, the claimed invention “could enable a computer to provide
14 a user a dynamically changing list of restaurants that depends on the user’s location, the time of day,
15 ratings provided by other users, and the user’s browsing history,” as well as “store historical
16 information to ensure that future processing for that user and other users is handled even more
17 efficiently.” Dkt. No. 193, at 4. Implementations of these ideas have long existed outside the realm
18 of computing. As defendants’ note, “searching for a nearby place to eat, or for a list of restaurants
19 open at a particular hour, or for those most frequented by others, does not solve a problem unique to
20 any field of computing.” Dkt. No. 200, at 4. Restaurant guides have long provided lists of
21 restaurants organized by cuisine, city, neighborhood, and rating. Libraries have long organized their
22 holdings by subject matter and author name, and have employed “dynamic” containers in the form
23 of rotating selections based on staff review, recent release, or other criteria, located in a specific
24 section of the library. Nor is the sort of curation envisaged by EI a new phenomenon: galleries stage
25 curated exhibitions, video rental stores (when there were video rental stores) had shelves of
26 “customer favorites,” and merchants of every kind have long kept track of what is popular, what is
27 new, and presented selections for purchase on these bases. Finally, the idea of “storing historical
28 information to ensure that future processing for that user and other users is handled more

1 efficiently” is practiced by every local barista or bartender who remembers a particular customer’s
2 favorite drink. The claims here merely take these age-old ideas and add a computer, which is
3 insufficient to confer patent eligibility. *See Alice*, 134 S. Ct. at 2358; *see also Bascom Research,*
4 *LLC v. LinkedIn, Inc.*, Case No. 12-6293, 2015 WL 149480, at *9–10 (N.D. Cal. Jan. 5, 2015)
5 (finding patent-ineligible “claims [that] amount[ed] to instructions to apply an abstract idea—i.e.,
6 the concept of establishing relationships between documents and making those relationships
7 accessible to other users.”).

8 EI’s insistence that the asserted claims are patent-eligible because they address specific
9 problems in the prior art related to the “static information model” used in computing also confuses
10 the “inventive feature” analysis under Section 101 with the ideas of novelty and nonobviousness
11 under Sections 102 and 103. Dkt. No. 193, at 2–4. To be novel, a patent claim must include an
12 element not present in the prior art. *See* 35 U.S.C. § 102. The “inventive feature” language in
13 Section 101 analysis is similar to language used in discussing anticipation and obviousness under 35
14 U.S.C. §§ 102 or 103. However, in the context of Section 101, “inventive feature” is better
15 understood as referring to the abstract idea doctrine’s prohibition on patenting fundamental truths,
16 whether or not the fundamental truth was recently discovered. *Alice*, 134 S. Ct. at 2357 (“Because
17 the algorithm was an abstract idea, the claim had to supply a ‘new and useful’ application of the
18 idea in order to be patent-eligible. But the computer implementation did not supply the necessary
19 inventive concept; the process could be ‘carried out in existing computers long in use.’”) (quoting
20 *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). The inventive feature question under Section 101
21 concerns whether the patent adds something to the abstract idea that is “integral to the claimed
22 invention” *Bancorp Servs., LLC v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278
23 (Fed. Cir. 2012). It is therefore important to distinguish between claim elements that are integral to
24 the claimed invention from those that are merely integral to the abstract idea embodied in the
25 invention. As discussed above, the application of the idea of searching and processing containerized
26 data in the ’682 patent amounts to the use of common, conventional computing components in a
27 way that could be carried out in existing computers long in use. Regardless of whether the concept
28 of “dynamically” updating information containers and registers may have been novel and

1 nonobvious at the time this patent was filed, the claims do nothing to ground this abstract idea in a
2 specific way, other than to implement the idea on a computer.

3 EI also contends that the asserted claims require “specific arrangements” of “computer-
4 specific” structures, “operating in a specific way.” Dkt. No. 193, at 17. EI further argues that the
5 claims are inventive because they include significant structural limitations such as the specific types
6 of registers that containers must have: “active time registers,” “passive time registers,” “acquire
7 registers,” “identified search query templates,” and so forth. *Id.* However, the limitations EI
8 identifies are simply functional descriptions of conventional concepts of data processing, such as
9 using data registers, or labels, to govern the interaction of various data. EI fails to explain how these
10 claimed fundamental elements, either individually or collectively, perform anything other than their
11 normal and expected functions. *See Content Extraction & Transmission LLC v. Wells Fargo Bank,*
12 *Nat’l Assoc.*, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (rejecting argument that inventive concept could
13 be found because additional claim limitations were “well-known, routine, and conventional
14 functions of scanners and computers”); *see also Internet Patents Corp. v. Active Network, Inc.*, Case
15 Nos. 2014-1048, 2014-1061, 2014-1062, 2014-1063, 2015 WL 3852975, at *5 (Fed. Cir. June 23,
16 2015). The elements of the ’682 patent’s claims are directed to employing time, location, and
17 history information in connection with data processing, and encompass nothing more than the
18 conventional and routine activities of searching, updating, and modifying data on a “computer
19 network operating in its normal, expected manner” using conventional computers and computer
20 components. *DDR Holdings*, 773 F.3d at 1258.

21 Furthermore, the above analysis makes clear that ’682 patent claims no more than a
22 computer automation of what “can be performed in the human mind, or by a human using a pen and
23 paper.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011). These
24 methods, “which are the equivalent of human mental work, are unpatentable abstract ideas.” *Id.* at
25 1371; *see also Bancorp*, 687 F.3d at 1278–79. (“To salvage an otherwise patent-ineligible process,
26 a computer must be integral to the claimed invention, facilitating the process in a way that a person
27 making calculations or computations could not. [Merely] [u]sing a computer to accelerate an
28 ineligible mental process does not make that process patent-eligible.”); *Cogent Med., Inc. v. Elsevier*

1 *Inc.*, 70 F. Supp. 3d 1058, 1060 (N.D. Cal. 2014) (Finding patent-ineligible claims that amounted to
2 no more than a computer automation of what can be performed in the human mind, or by a human
3 using a pen and paper) (internal quotation marks and citation omitted).⁷

4 Finally, the patent's ineligibility is confirmed by the machine-or-transformation test.⁸ Here,
5 the transformation prong is inapplicable and the claimed methods are not tied to any particular
6 machine. The claims require nothing more than a general purpose computer, "the mere recitation of
7 [which] cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*,
8 134 S. Ct. at 1258. Instead, to confer patent eligibility on a claim, the computer "must play a
9 significant part in permitting the claimed method to be performed, rather than function solely as an
10 obvious mechanism for permitting a solution to be achieved more quickly" *SiRF Tech., Inc. v.*
11 *Int'l Trade Comm'n*, 601 F.3d 1319, 1333 (Fed. Cir. 2010). As was discussed above, the generic
12 computer required by the claims does no more than automate what "can be done mentally." *Benson*,
13 409 U.S. at 67.

14 In sum, the '682 patent is directed to the abstract idea of searching and processing
15 containerized data and does not contain an inventive concept sufficient to transform the claimed
16 subject matter into a patent-eligible application. Like the computer elements in *Alice*, the steps of
17 the '682 patent, considered individually or as an ordered combination, add nothing transformative to
18 the patent. Rather, the claims of the '862 patent merely recite routine and conventional computer
19 operations and structures as a means of implementing the abstract idea of searching and processing
20 containerized data.⁹ Accordingly, because the '862 patent fails to claim patent-eligible subject
21 matter, the court GRANTS defendants' motion to dismiss as to the '862 patent.

22 ⁷ The court is also mindful that a patent on the abstract idea of searching and processing
23 containerized data which lacks a specific inventive concept to limit its scope poses a real threat of
24 preemption, and might well "tend to impede innovation more than it would tend to promote it,
25 thereby thwarting the primary object of the patent laws." *Alice*, 134 S. Ct. at 2354.

26 ⁸ While "[t]he machine-or-transformation test is not the sole test for deciding whether an invention
27 is a patent-eligible 'process,'" it is still "a useful and important clue." *Bilski v. Kappos*, 561 U.S.
28 593, 604 (2010).

⁹ *Alice* makes clear that the '682 patent's apparatus and computer product claims rise and fall with
the method claims. "[N]one of the hardware recited by the [apparatus or computer component]
claims offers a meaningful limitation beyond generally linking the use of the [method] to a
particular technological environment, that is, implementation via computers." *Alice*, 134 S. Ct. at
2360 (internal quotations omitted, [method] alteration in original). "Put another way, the [apparatus
and computer component] claims are no different from the method claims in substance. The method
claims recite the abstract idea implemented on a generic computer; the [apparatus and computer

2. '536 Patent

Defendants contend that the '536 patent claims the abstract idea of "storing information in labeled containers with rules and instructions on how the container or contents may be used." Dkt. No. 188, at 16. EI's position is that the '682 patent "focus[es] on processing constantly changing information corresponding to time and location to make future processing of time and location information by computers more efficient." Dkt. No. 193, at 15. The independent claims of the '536 patent are directed to "containers" comprising: (1) "an information element having information," (2) various "registers," and (3) a "gateway" for controlling interaction of the container with other containers, systems, or processes. The court finds that the '536 patent is also directed to an abstract idea: containerized data storage utilizing rules and instructions. Also like the '682 patent, the '536 patent merely computerizes the underlying abstract idea, taking advantage of the conventional advantages of computers in terms of efficiency and speed.

EI advances no separate arguments regarding the patent eligibility of the '536 patent under the second step of the *Mayo* analysis, and so the court finds that this patent also fails to claim patent-eligible subject matter, for the reasons set forth above. Accordingly, the court GRANTS defendants' motion to dismiss as to the '536 patent.

III. Order

For the foregoing reasons, defendants' motion to dismiss and for judgment on the pleadings is GRANTED.

Dated: October 6, 2015



RONALD M. WHYTE
United States District Judge

component claims] claims recite a handful of generic computer components configured to implement the same idea." *Id.* Because the apparatus and computer product claims "add nothing of substance to the underlying abstract idea," they also fail to claim patent-eligible subject matter required by Section 101. *Id.*

PROOF OF SERVICE

I hereby certify that I electronically filed the Appellant's Opening Brief with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the CM/ECF system on May 16, 2016. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system.

/s/ Todd Kennedy

Todd Kennedy

CERTIFICATE OF COMPLIANCE

Pursuant to the Federal Rules of Appellate Procedure, Rule 32(a)(7)(c), I hereby certify that the foregoing brief of Plaintiff-Appellant complies with the word count limitation of Rule 32(a)(7)(B). There are 12,846 words in the brief according to the word count function of Microsoft Word version 15.19.1, the word processing program used to prepare the brief.

Respectfully submitted this 25th day of April, 2016.

GUTRIDE SAFIER LLP

/s/ Todd Kennedy

Todd Kennedy
Attorney for Plaintiff-Appellant